Department of Economics and Finance

Chair of Equity Markets and Alternative Investments

The Impact of a Private Equity on an Energy Company in the Brazilian Market Scenario

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Dedicata al mio papà, Ettore,

un uomo invincibile

Contents

1. Introduction

1.1 Thesis Structure

This master thesis analyses the Private Equity world, examining the role they play in the financial markets, among investors and how they are composed and structured.

Nowadays private equities are an influent presence in the markets, since they make huge transactions buying and selling companies around the markets. A private equity is a kind of "investment club" given that all the investors that take part at the transactions are institutional investors such as banks, investment funds, companies, pension funds, and so on. The purpose of a private equities is to invest its money (money of these institutional investors) in private companies which are already studied and identified by PE's managers, and, after a given period of time, sell it to make profit.

This thesis explains the way the private equities conduct their everyday operations and their strategies to achieve their goal. In the recent years, private equities are giving an important contribution to market development, technological progress and business improvement through their focused investments and this elaboration is a proof of this market evolution.

Brazilian market is highly volatile and risky given its classification as an emerging country, but for that and other reasons it is an interesting market to focus in. High volatility means both large capital inflows and large capital outflows, very high interest rates and irrational investor's reactions, hence this is a pool of opportunities to extract experience and knowledge.

In this analysis there is an overview on the Brazilian private equity market, trying to understand the dynamics of private equities in the Latin America markets over the last 50 years, to introduce one protagonist on this scenario: Vinci Partners.

Follows the deep understanding of this figure regarding its allocation of funds and among its competitors on the market.

Vinci Partners is one of the most influencing private equity on the Latin America market, that is the reason why it was taken in consideration for the analysis of one of the companies it is investing in.

A Case Study is conducted to better catch the repercussions of a private equity on a firm. It is analyzed an electric company named Equatorial Energia, from the beginning of its business owned by the fund GP Investments in 2004, passing to the acquisition from the PE Vinci Partners, arriving to the exit of the latter. The company is examined year by year through its activities and catching its strategies.

1.2 Purpose of the Study

All finance people know how important and embedded the economic institutions, the banks, the pension funds, the rating agencies, the investment funds, the private equities are in the market scenario. It is common knowledge the relevance of the transactions made by the above written participants and the heaviness of the decision taken by one of them. All these financial decision-makers could influence the results and the consequences of other people worldwide. The last global financial crisis started from Island, arrived in USA and passed through the Atlantic Ocean expanding to Europe, it is a direct effect of the Globalization that is naturally embracing the world and the people that live in.

The purpose of that thesis is trying to understand how these huge amount of money moves from investors to institutions to private equities to worldwide companies and which are the reasons behind that decisions.

Specifically, the main aim is to comprehend in which measure a private equity is able to influence a firm that belongs to its portfolio investment and which are (if there are) the benefits the target company gains.

1.3 Methodology

To analyze the influence that a large fund has on a company it has been taken as a landmark a Case Study, which is the most scientific way to comprehend the reality.

After focusing the attention on the private equity, understanding its position in the market, it is then examined the business and the industry in which the company works in. Follows a deep introspection regarding the evolution of the company in the years in which it was under the control of the private equity. At the end, it is analyzed the gradual change during the length of time in which the private equity participated to the life of the firm, from the entry to the exit date. The analysis has been conducted numerically through the help of Balance Sheet, Cash Flow Statements and Income Statement of the company itself.

2. Private Equities

2.1 Introduction to Private Equity

Since we are going to deal with Vinci Partners, a Brazilian Private Equity, it would be useful to have a brief explanation regarding the role, the scope and the work of Private Equity firms in general.

Private Equity (PE) firms directly invest in illiquid equity capital of companies which are not listed on public exchanges and represent a vehicle for institutional investors and high net worth individuals to indirectly participate. Important PEs are a huge source of capital and for that reason they are a crucial component of modern finance.

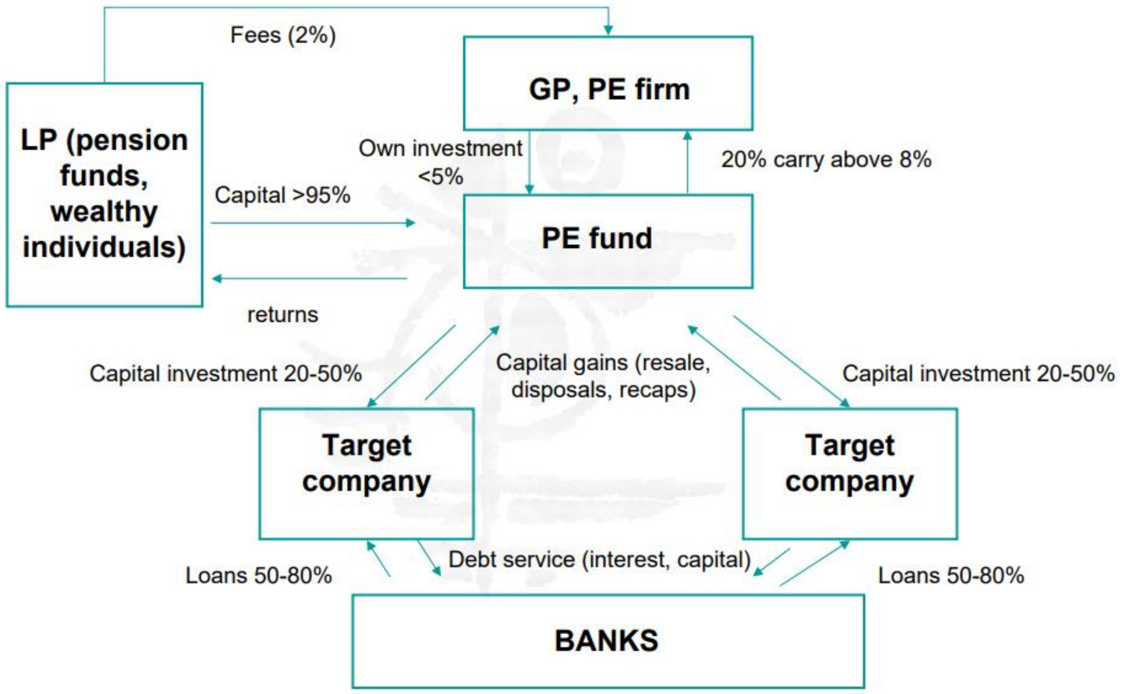
They are basically composed of Limited Partners (LPs), who raise money for the PE fund, like institutional investors such as insurance companies, banks, pension funds, university endowments; and General Partners (GPs), who manage those money, they are generally professional investors who allocate the PE's capital. Then the PE Fund deals up with the various Portfolios in which it is investing in.

GPs generally require a c.a. 2% annual fee of capital invested to the LP to cover basic costs such as legal services, data and research costs, marketing expenses, firm salaries, deal sourcing and other administrative and fixed costs. In addition to this fee, normally there is another one composed of proceeds from the fund, which can be dividends or also gains from the selling of portfolios companies (or part of them). All the clauses between the parts are decided in the Limited Partnership Agreement (LPA).

The relationship between the interested actors in the investment through PEs are represented in a clear way from the next picture.

LPs, which could be pension funds or wealthy individuals, finance the GPs, which actually compose the PE. With these financings, both create the PE fund. Then, the latter chooses different target companies to invest its funds, typically the capital investment is between 20-50% of the firm's total equity. The returns are then shared among LPs and GPs as the LPA affirms[1]. Of course, every company can apply for a bank loan (50-80% of total equity), when there is necessity of further capital.

[1] Specifically, it is better explained in the chapter "5.5 Brazil".



The typical stages a PE follows are four: *Organization/Fundraising*, *Investment*, *Management*, *Harvest*. Considering a typical life-time period of 10 years for a PE, the first phase usually lasts between 0 and 1,5 years and it is the length of time in which LP recruits investors to raise capital. Unfortunately, PEs cannot raise money through the help of newspapers, social networks, online sources or other types of advertisement given their high confidentiality, so the fundraising is done through word of mouth among LPs or with Placement Agents (intermediaries which job is exactly to collect money for funds). This phase is extremely challenging, particularly in crisis periods.

One of the most important purpose of a PE is to build up a strong relationship with investors, who actually are the initial point for the beginning of the whole cycle, and with gatekeepers too. The latter are organizations that help investors in the allocation decision process.

When the Fundraising is completed, it starts the second step which is the Investment part. This phase could overlap the first, the Investment lasts between 1 and 4 years. GPs usually need time to scout deals before investing money and to decide where to allocate the funds and in which percentage. A PE makes generally two types of investments: *fund investing*, when the capital is provided in a fund, and *direct investing*, when the capital is placed in portfolio companies. For example, in the case of Vinci Partners, its three funds invest directly in different kinds of portfolio companies.

The third stage is the Management part, which goes approximately from year 2 to 7. Those are years in which the PE has to manage the investments it did. It could be interesting for PE investors to attract other funds to expand the invested capital, building up a *syndicated investment*[2] (or a *club deal*), in order to diversify risk, to create relationships with their counterparties or to increase liquidity.

The last phase goes from year 4 to 10 and it is the Harvest or simply the Disinvestment period. During this length of time the GP must focus on raising up the returns from the investments it made in the second period. The GP also has to differentiate the profitable investments, which will be financed again, from the worthless ones, which will be liquidated. In this last phase, the PE should be capable to understand on time which business are useful and which are not.

The common policy adopted by the most significant PEs is to open and close different Funds successively, in order to differentiate the risk over different companies and maximize the returns. Considering our case, Vinci Partners raised up its first Fund, called VCP I, in 2004 investing in 1.2 billion of R$ (US$ 451 million) until 2008, then it opened the Fund II in 2011 and exited it in 2016, and now, in 2018, it is investing in the Fund III.

Private Equity firms typically invest in companies which belong to different sectors of the market and have distinctive strategies to invest in them. We can classify those deals in:

- *Venture Capital*: are used to finance small to medium companies which are at the early stage and cannot have access to conventional financings;
- *Growth Capital*: PE funds help to finance enterprises that want to Grow their Capital, usually because those companies have not assets (or they have few) so they cannot use them as collateral to expand their capital;
- *Leveraged Buyout* (LBO): is used when a company acquires another company through a loan collateralized with the own assets of the target company;
- *Distressed Situation*: when a company is not able to cover its own debts, so the Private Equity fund recapitalizes its balance sheet.
- *Greenfield*: occurs when the firm builds a new firm/plant in the foreign country from scratch;
- *Turnaround*: is a technique to financially recover a company that performed badly for long time. It is difficult to take in place since the company needs to find out its problems, to value any change in the management, to realize and to implement the best problem-solving strategy.

[2] "A syndicate is a temporary professional financial services alliance formed with the purpose of handling a large transaction that would be hard or impossible for the entities involved to handle individually. Syndication allows companies to pool their resources and share risks." (Definition from https://www.investopedia.com/terms/s/syndicate.asp)

Another crucial point concerning Private Equity funds is their confidentiality. It is essential to conduct their operations avoiding conflict of interests between parts.

2.2 Brazilian Private Equity Market

Venture Capital and Private Equity are fundamental tools for the growth in capital markets but above all for emerging economies, that is the reason why those two types of capital raising are one of the most expressive ways of investing in Brazil. Of course, it is a kind of investment that involves companies with high growth and profitability levels, through the acquisition of shares or other financial instruments with the purpose of gaining returns in the medium – long term. In Brazil, Private Equities and Venture Capitals finance, or they should finance, all the small and medium enterprises which would expand in size providing them a better corporate structure, focusing on returns and on their growth, contributing for a future stability. In particular, Venture Capital relate to firms in their initial state while Private Equities to more mature companies, usually in phase of consolidation and/or expansion.

2.2.1 History of Brazilian Private Equity

While Private Equity funds worldwide appeared between 1920 and 1950, in Brazil the first ones emerged during the late '70s.

The first actions realized from the Brazilian Government for the birth of Private Equities and Venture Capital were implemented in 1974 with the programs of the Brazilian Development Bank ("*Banco Nacional de Desenvolvimento Econômico e Social*" - BNDES) and successively in 1976 with projects of the Fund for Studies and Projects ("*Financiadora de Estudos e Projetos*" – FINEP).

According to information of the Brazilian Census of Private Equity and Venture Capital, in 1994 there were only 8 fund managers. Just in 6 years, in 2000, this number arrived to 45 and reached the number of 132 in 2008, when in the first semester of the same year 24 funds collected about US$ 2.6 billion. Following the data of the same Census, in 2009 the industry of Private Equity and Venture Capital counted 180 fund managers, with 1.747 specialists involved in this industry, 236 investment vehicles and 554 companies in portfolio. These data are just to comprehend how rapidly PEs expanded in the Brazilian market scene in few years.

It can discern the intrinsic characteristics of the evolution over time of this market through a study conducted by the Strategic Research Center of Insper Institute of Education and Research and Spectra Investments[3], which reports the different phases of the of PEs in Brazil:

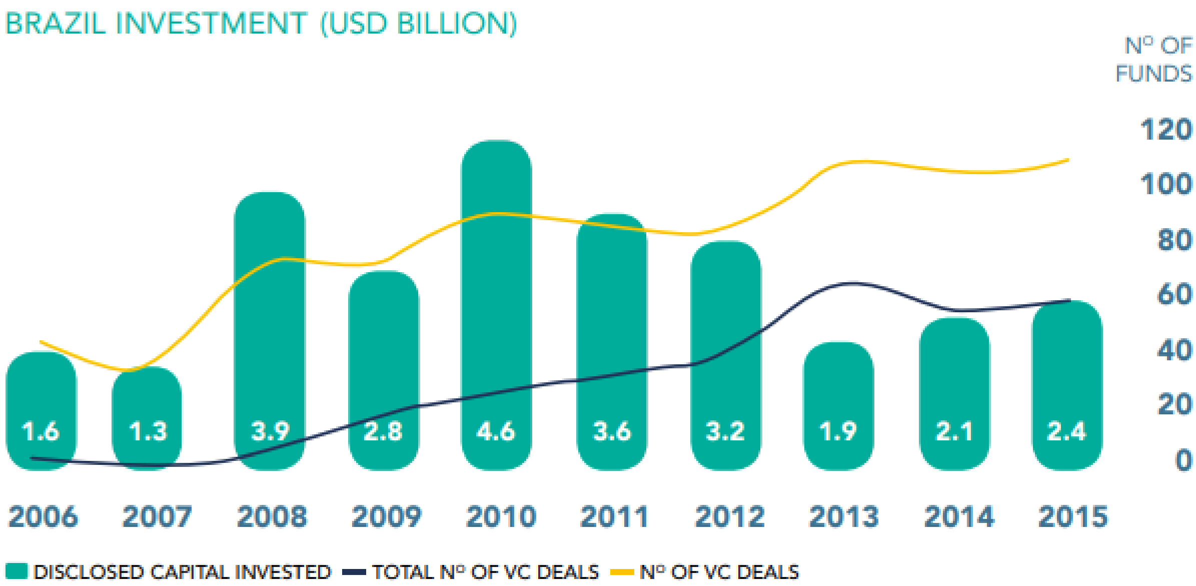
[3] Insper is a Brazilian higher education institution focusing on business, economics and engineering placed in São Paulo. Here the article: https://www.insper.edu.br/wp-content/uploads/2015/04/Analysis-Private-Equity-Venture-Capital-investments-in-Brazilian-companies-versao13-04-15.pdf

- From 1982 to 1993 in Brazil there was economic stability, high inflation and inexistence of a capital market, therefore big and foreign investors preferred to deal up with other countries.
- From 1994 to 1998 was applied the so-called "Plano Real", the Real Plan, which was a set of measures used to stabilize the Brazilian economy, so the currency due to the hyperinflation. During the same period, many international investors were attracted by the privatization of various public companies, increasing the deal size with PE.
- From 1999 to 2005 was a poor period for the Brazilian market due to the Real devaluation, International Crises and Internet Bubble that burst. In this scenario, the unsolid bases of the Funds made in the previous period crashed down.
- From 2006 to 2014 is the period in which Brazil finally sees the effects of the regulatory plans in the country. These years are characterized by economic stability and positive economic indicators so that the country got the benefits of international liquidity. As a result, the deal size in private equity funds improved.

Besides, the study of the Insper University and Spectra Investments affirms that over the time the Brazilian PE Market was not concentrated on one or two industry sectors, there was dynamism instead. This means the industry has been diversified in several sectors such as real estate, telecommunication, electric power and water, retail and manufacturing, the most invested segments from private equity and venture capital in the Brazilian industry. This can be explained due to that Brazil is an emerging market, so the optimal way to reduce risk and increase return is diversifying the investments.

The graph below[4] shows the amount of capital invested from foreign investors in Brazil over the length of time from 2006 to 2015. As it can be deducted, 2010 was the most profitable year and 2007 was the less one regarding the number of foreign funds that invested in Brazil. Even though the disclosed capital invested has a volatile trend, the number of Venture Capital deals and its total slowly increased year by year, meaning that foreign investors appreciated the Brazilian market even more each year.

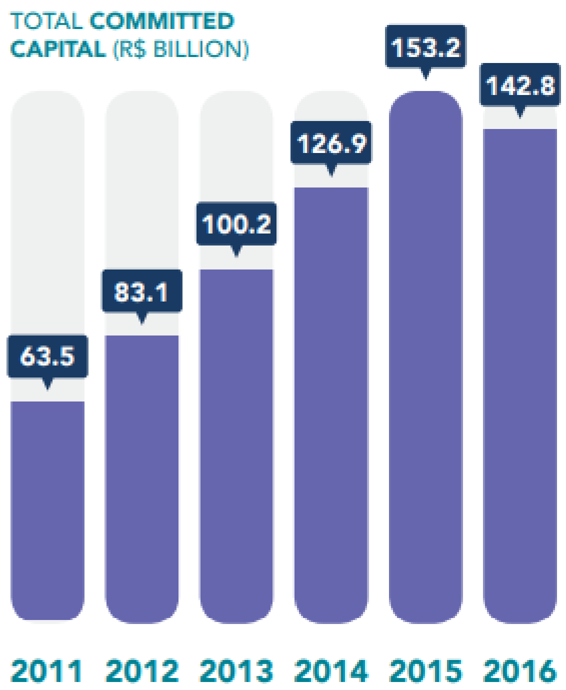
[4] Graph taken from ABVCAP (Associação Brasileira de Private Equity e Venture Capital) Website: http://www.abvcap.com.br/Download/Estudos/4009.pdf

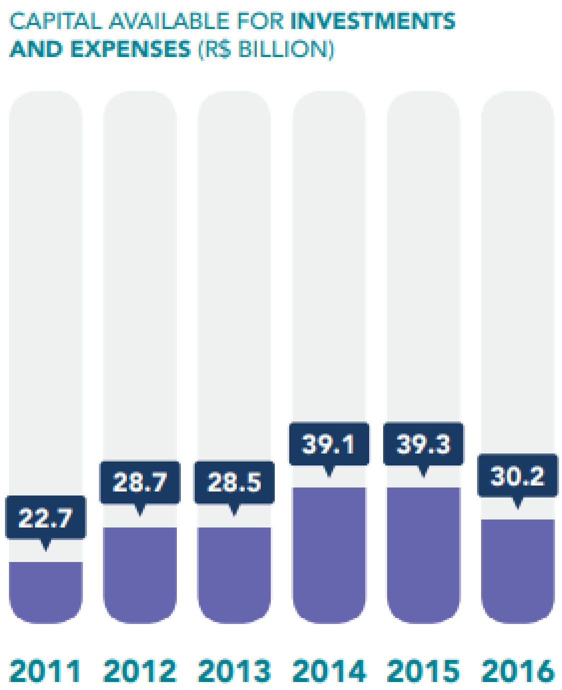


Arriving closer to nowadays and taking in account a research[5] made from ABVCAP (Associação Brasileira de Private Equity e Venture Capital) and KPMG, it is comprehended that in the last years the investments and the investee companies oscillated too. In fact, in 2014 the volume of investments in Brazil was R$ 13.3 billion (US$ 5 billion), in 2015 was R$ 18.5 billion (US$ 4.67 billion), in 2016 was R$ 11.3 billion (US$ 3.47 billion), while the total number of investee companies in Brazil was 186, 159 and 157, in the respective years.

As it can be observed from the graphs below from ABVCAP and according to the above information, the investments in Brazil grew positively and with a confident rate until 2016. In this year, the business got weaker both for Total Committed Capital and for Capital Available for Investments and Expenses.

[5] http://www.abvcap.com.br/Download/Estudos/3810.pdf





From 2011 to 2015, the total capital available for investments and expenses was about the 31% of the total committed capital. The 2014 was a year in which there was more fund raising than Investment or Divestment activities, but in 2015 were registered more transactions rather than attraction of capital.

The consulting firm KPMG and ABVCAP made a research[6] regarding the Brazilian market. In it they affirm that in the last years, starting from 2012, the amount of foreign capital raised to be invested in funds increased with respect to the domestic capital, passing from 49% in 2012 to 57% in 2015. This can be explained from 2 reasons: (i) the reduction of the asset prices in dollars, which assets were seen more attractive from international investors; (ii) the small growth of the real Brazilian GDP and the not too much optimistic projections in the Brazilian economy due to the higher fiscal deficit, political instability which affected the Brazilian economy during that years. For these reasons the willingness of national investors to invest in Brazil was dramatically reduced.

When in 2008 Standard & Poor's granted to Brazil the status of Investment Grade, the Country began to represent an important place for long-term opportunities compared to other emerging economies. Besides, Pension funds are betting more and more in the sector of Private Equity, and it is important since international funds played a key role in the development of this industry in European Economic Area and in other developed countries.

[6] http://www.abvcap.com.br/Download/Estudos/3484.pdf

Brazil is an interesting country where investing because of its different and diversifiable options, fragmented sectors to be consolidated and the alternative of exiting the investment obtaining liquidity.

2.2.2 Key Players

The pool of Private Equities in Brazil is variegated and, according to the "Best Private Equity Funds in Brazil - Ranking 2018"[7] of Leaders League, they can be classified in 3 categories:

- *Leading*: Actis Capital, Advent Intentional, Brookfield, Carlyle Group, General Atlantic, GP Investments, Gávea Investimentos, H.I.G. Capital, Kinea Investimentos, Pátria Investimentos, Tarpon Investimentos;
- *Excellent*: Angra Partners, Bozano Investimentos, BTG Pactual, Cambuhy Investimentos, GIC Private Limited, Kaszek Ventures, L Catterton, Tiger Global Management, Vinci Partners;
- *Highly Recommended*: 2BCapital, Aqua Capital, Artesia Gestão de Recursos, Axxon Group, DGF Investimentos, Equity International, Monashees Capital, Ouro Preto Investimentos, Rio Bravo Investimentos, Trivèlla Investimentos.

[7] https://www.leadersleague.com/pt/rankings/melhores-fundos-de-private-equity-do-brasil-ranking-2018

2.3 Vinci Partners: Overview

Vinci Partners is a platform of alternative investments, it was founded in 2009 by Senior Executives of UBS Pactual Capital Partners and has its headquarter in Rio de Janeiro, Brazil. It is specialised in equity, asset management, wealth management, credit and financial advisory.

Vinci Partners Private Equity is the Private Equity Firm of Vinci Partners and it is the firm it will be analysed in this script. It started to invest in 2004, investing in more than 40 companies until today and more than "*R$ 3 billion (US$ 778 million) in partnership with different market constituents, such as entrepreneurs, financial investors and multinational companies*".[8]

The most significant transactions of Vinci Partner are in Greenfield Investments, Growth Capital, Buyouts and Turnaround within different markets such as emerging growth, middle or mature markets.

Vinci's main work is based on infrastructure and electric sector, like power generation and transmission, airports and sanitation, but the investment horizon of Vinci Partners is also open to variegated businesses such as clothing stores, education, food, healthcare, insurance, Information Technology, materials, transportation, utilities and other smaller sectors.

The acquisition criteria of this PE are to have the control or the joint-control position, investing from a minimum Equity of US$ 100 million to a maximum Equity of US$ 200 million in companies with an EV (Enterprise Value) between US$ 200 and 600 million.

[8] From Vinci Partners' website: http://www.vincipartners.com/negocios/privateEquity

2.3.1 Composition of the Funds

The portfolio of Vinci Partners until today is presented as follows:

- VCPI, from 2004 to 2008, investing R$1.2 billion (US$ 518 million) in 10 companies in several sectors such as energy, retail, agribusiness, education and others, as can be seen from the picture below:

Company Name	Industry	Entry Date	Exit Date
Inbrands S.A.	Consumer and Retail	2008	2018
Sollus Gestora de Terra Ltda.	Agribusiness	2008	/
Usina Canadá	Agribusiness	2008	2014
Los Grobo	Agribusiness	2008	2016
CMAA	Agribusiness	2007	2013
Fanor	Education	2007	2009
Light	Electricity	2006	2011
Satipel	Industrials	2006	2007
Equatorial Energia	Electricity	2006	2015
PDG Realty	Real Estate	2004	2010

As the portfolio composition of this first fund suggests, the investment periods in those sectors are different does not depend on the business. Those periods go from a minimum of 1 year, such as in the superior education sector of Fanor, to a maximum of 10 years in the industry of Consumer and Retail with Inbrands.

- VCPII, from 2011 to 2016, investing R$1.8 billion (US$ 0.55 billion) in 10 companies in retail, transportation, education, insurance and construction sectors:

Company Name	Industry	Entry Date	Exit Date	% shares
Uniasselvi	Education	2015	/	/
CBO	Oil & Gas Services	2013	Ongoing	40%
Le Biscuit	Consumer & Retail	2012	Ongoing	40%
Cecrisa	Industrials	2012	Ongoing	77,39%
PDG Realty	Real Estate	2012	Ongoing	21,62%
Burger King	Quick Service Restaurant	2011	Ongoing	32%
Austral Seguradora	Insurance	2011	Ongoing	55,5%
Austral Resseguradora	Reinsurance	2011	Ongoing	55,5%
Unidas	Consumer & Retail	2011	Ongoing	14,66%

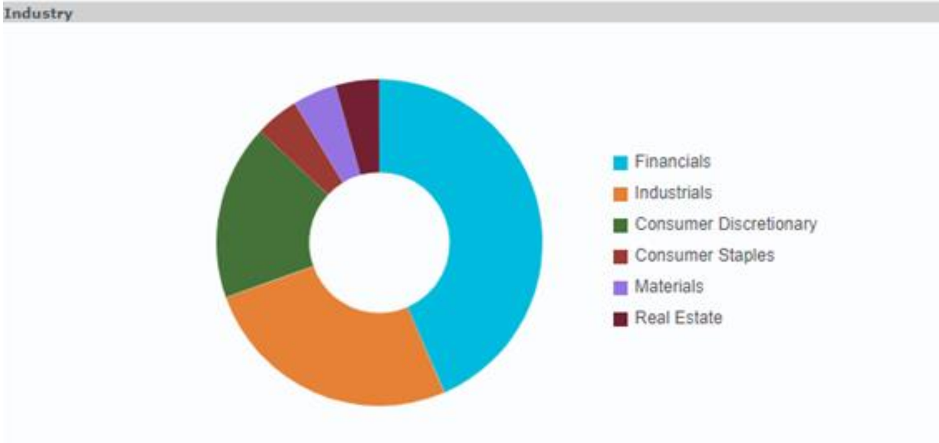
In this second fund Vinci Partners experienced other different sectors to invest in and in more of them acquiring the majoritarian ownership.

- VCPIII, the last fund, is now in investments period therefore is not possible to have access to it.

When a PE invests, it already should know all the path it has to follow in the next years and knows all the step it has to follow regarding the investment itself, the management and the disinvestment too. Here lies all the beauty of the PEs: their focused and deeply organised strategy.

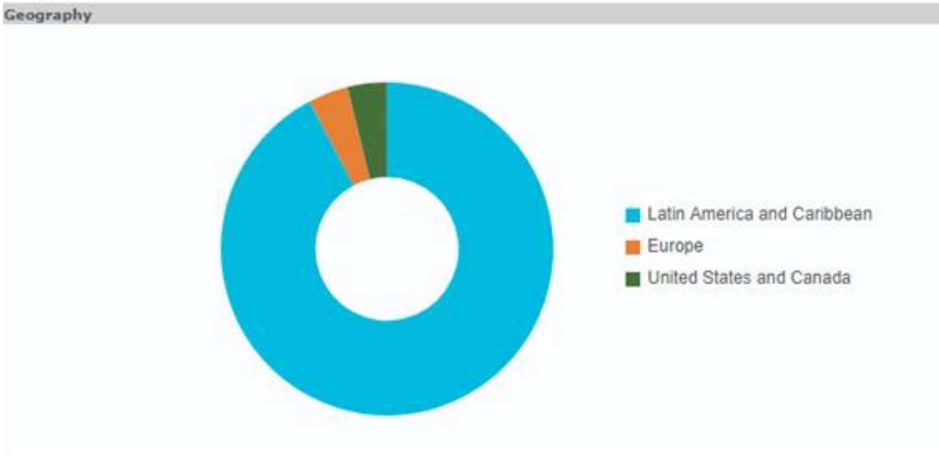
Regarding the composition of the funds from an industrial profile, at the moment Vinci Partners has 26 Direct Investments, fragmented as follows:

Financials 43,5% with 10 DI; Industrials 26,1% with 6 DI; Consumer Discretionary 17,4% with 4 DI; Consumer Staples 4,3% with only 1 DI; Materials 4,3% with 1 DI; Real Estate 4,3% with 1 DI.



Source: Capital IQ[9]

Regarding the Geography of Vinci Partners, the firm invests above all in companies situated in Brazil but also in the whole Latin America and Caribbean (92,3%), Europe (3,8%), United States and Canada (3,8%).



Source: Capital IQ

[9] https://www.capitaliq.com/

3. Case Study: Equatorial Energia S.A.

Before the birth of Equatorial Energia S.A., the holding Brazilian company we know today, it only existed the CEMAR (Companhia Energética do Maranhão) which was founded in 1958. At that time the CEMAR handled the distribution of electricity in the entire state of Maranhão.

Today Equatorial Energia distributes, transmits, generates, and trades electricity in Brazil, primarily in the State of Maranhão and Pará.

The company operates in 5 sectors in different States in Brazil through other companies such as CELPA and CEMAR in the distribution sector, which represent the 97% of the profits; Geramar in the generation sector, of which Equatorial holds 25% of its controlling stake through two thermoelectric plants; 55 Soluções is the firm that operates in the services segment; Sol Energias is the company indirectly acquired by Equatorial Energia with the 51% of the shares; and the last sector is the transmission one which is not working already, since this segment is under development right now.[10]

In 2006, ABRADEE (Associação Brasileira de Distribudores de Energia Elétrica) affirmed that Equatorial Energia was the second Brazilian biggest electricity distributor in the North-East for area extension, with 21,4% of total extension in the North-East; it was the fourth in terms of consumers number, with 9,0% in the North-East region; and fifth on the level of energy consumption, with 7,0% of the total in the same North-East area.

Today the portfolio of Equatorial Energia is differentiated as follows:

Source: Equatorial Energia Website[11] (February 2018)

[10] http://www.equatorialenergia.com.br/interna_print.asp?conta=44&idioma=1&tipo=1928
[11] http://www.equatorialenergia.com.br/conteudo_pt.asp?idioma=0&conta=28&tipo=1972

3.1 Equatorial Energia: evolution over time

Equatorial Energia is one of the biggest electricity companies in Brazil, today is investing in 6 different Brazilian firms and handles with several sectors in the electric field.

Just 100 years ago the landscape in Brazil was completely different: public lighting used whale oil lamps and gas lighting. The development of energy started at the beginning of 1900 in the big cities such as São Paulo and Rio de Janeiro, with the first investments that came from foreign capital to build up electric companies. The years between 1920-1930 were distinctive for the industrialization and urbanization which were intensified more at the end of the Second World War. The urbanization let to the necessity of increasing the offer of energy which was becoming much higher than the demand. After the war the electric sector in Brazil started to receive more attention at national level, period in which the government started to construct the first power plants.

The decade of 1980-1990 was entirely dedicated to the construction of the so-called "Usina Hidrelétrica" (Hydroelectric Plant), placed in Paraná, between Brazil and Paraguay. This plant is world leader in the production of clean energy, producing more than 2,5 billion of Megawatt/hour.

The 2000s brought the crisis of electric rationing due to unfavourable weather conditions in the South-East of the country. Nowadays, the "Agência Nacional de Energia Elétrica" (National Electric Energy Agency) is responsible for regulating the whole system within the legal competences.

This brief path was useful to introduce and to better understand the market in which Equatorial Energia works.

3.1.1 Before the Acquisition from Vinci Partners

CEMAR was the first firm belonging to the group Equatorial. From the date of its foundation until 2000 it was ownership of the State, becoming private only in June 2000. The next years were not good times for the company, since it experienced economic and financial problems.

Between 2002 and 2004, GP Investments, one of the leading alternative investment firms in Latin America, tried to help the company in distressed situation building a restructuring plan with the creditors of CEMAR, which were mainly Eletrobrás and Eletronorte. This plan was approved and implemented in 2004 by ANEEL (Agência Nacional de Energia Elétrica), it was the same year in which GP Investments acquired CEMAR and the latter passed under the control of Equatorial Energia.

In 2004, Equatorial Energia was considered one of the worst energy companies in the sector, when it was acquired by GP Investments. As we can check from the table below, 2004 was the poorest year in terms of EBITDA and Consumer numbers.

Table 3.1	2003	2004	2005
Net Revenue	422,6	526,1	665,4
% Var		*24,5*	*26,5*
EBITDA	93,2	85,4	188,6
% Var		*(8,4)*	*120,8*
Profit	(57,2)	122,9	228,8
% Var		*N/A*	*86,2*
Net Debt	633,2	438,2	350
% Var		*(30,8)*	*(20,1)*
Billed Energy	2.521	2.593	2.793
% Var		*2,9*	*7,7*
Consumer Number	1.116.361	1.161.283	1.254.399
% Var		*4,0*	*8,0*

[12]

Source: Listing Prospectus Equatorial Energia, March 2006

Just one year later, in 2005, the Fund managed by Vinci Partners bought its shares, becoming majoritarian shareholder.

Vinci Partners is one of the biggest and most profitable Private Equity in Brazil and as an important one it would never act before it has not the full knowledge and certainty of taking the right way. When a Private Equity executes a transaction, that could be from 3 to 10 or more years, it has been studied from the managers and other employees in the full details form the beginning until the end. The nutshell is that when Vinci Partners acquired Equatorial Energia in 2005, it knew how to manage it and how to do to bring the company to the output level required to make the company a profitable one.

3.1.2 Reasons why Vinci Partners acquired Equatorial Energia

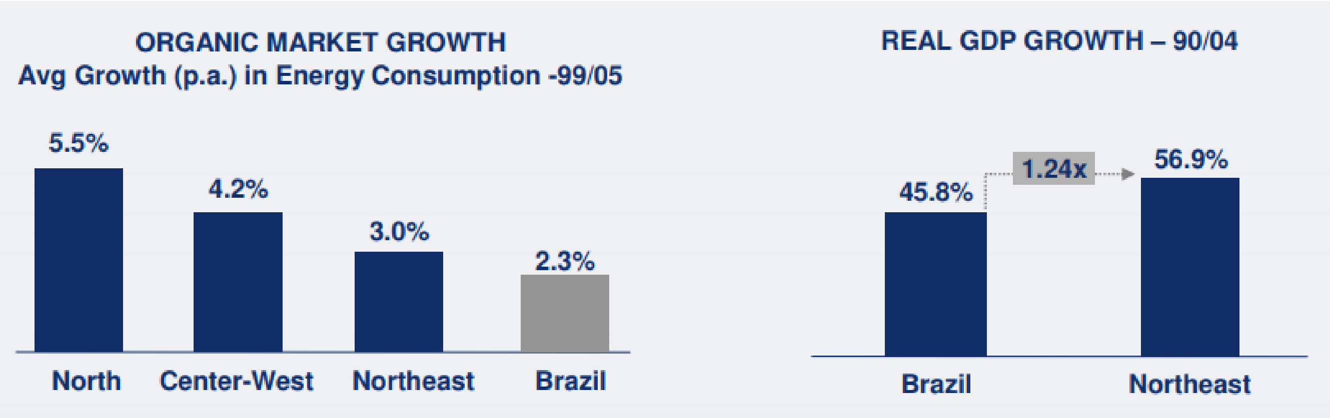
Before and from 2005 on, the managers of Vinci saw in Equatorial Energia a perspective of an excellent investment in the long-term for several rationales.

As it is shown in the graphs below, the significative growing potential given by the demand expansion in the markets of the North, Centre-West and North-East region of Brazil, where the average growth in energy consumption was 5,5%, 4,2% and 3,0% respectively, while in the rest of Brazil was about

[12] Billed Energy in GWh and Financial values in R$ millions.

2,3%[13]. Also, the real GDP growth was higher in the North-East regions of Brazil, where the growth was 56,9%, rather than in the rest of it, just 45,8%[14].

The regions of North, North-East and Centre-West of Brazil, from the electricity point of view were the most lucrative from the end of the XX century until the first years of XXI.



Source: ABRANDEE, ANEEL, IBGE, FGV, SUDENE, CEMAR Reports[15]

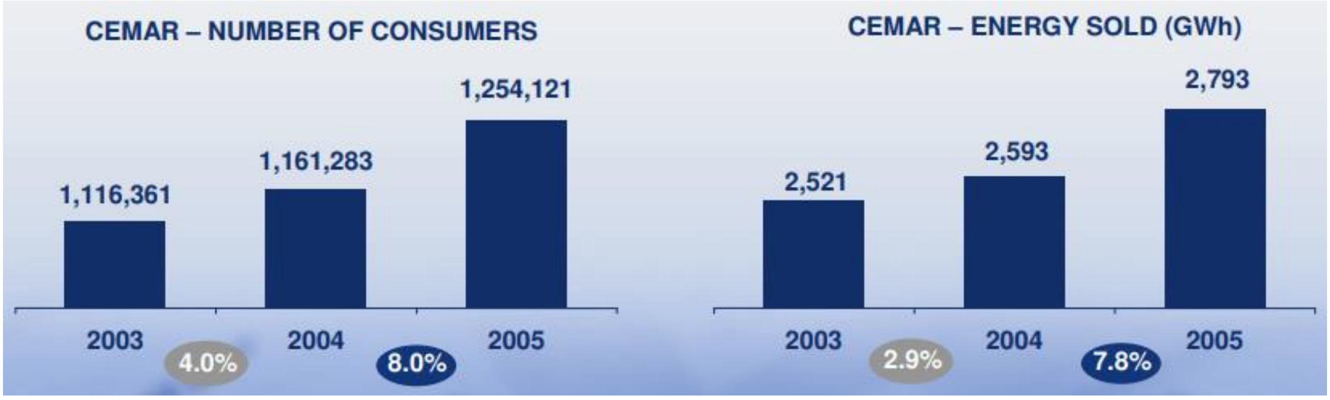
Again, referring to the table 3.1, Equatorial Energia was seen as a good investment from Vinci Partners also for its Financial Capacity. The leverage ratio (Net Debt/ EBITDA) was 1,9 at the end of 2005 and there was a decreasing of 20,1% in Net Debt from 2004 to 2005, symptom of continuity of the investment process and future growth. The EBITDA got a decrement of 8,4% from 2003 to 2004, but it reached R$ 188,6 million in 2005, an increase of 120,8% compared to 2004. This paradoxical increment could be explained from the acquisition from GP Investments and from the restructuring plan implemented by ANEEL in 2004, which positively altered the firm’s financials.

Another advantage of the company was the solidity of the management team and the high level of the Corporate Governance with strengths in professional capabilities, above all in the restructuring area but also in complementary ones such as in the financial area with specialists with high experience in M&A.

Looking at the CEMAR alone, the first firm belonging to the Equatorial Energia group, the number of consumers increased positively year by year before the acquisition from Vinci, with a positive increment of 4,0% from 2003 to 2004 and 8,0% from 2004 to 2005.

[13] Information from 1999 to 2005.
[14] Information from 1990 to 2004
[15] From Equatorial Energia website: http://www.equatorialenergia.com.br/conteudo_en.asp?idioma=1&conta=44&tipo=58004&id=0&submenu=0&img=0&ano=2005

In the same year (2005), the business got a positive wave in the distribution sector, dealing 2.793 GWh (Gigawatt hours) in the whole North-East of Brazil, growing 7,8% of billed energy more respect to the previous year.



Source: ABRANDEE, ANEEL, IBGE, FGV, SUDENE, CEMAR Report[15]

These were all reasons to think that CEMAR, and the future Equatorial Energia, would have been a profitable investment from Vinci Partners' perspective.

Insight on North Brazilian's regions

It is interesting to highlight that all the regions which CEMAR invested in were situated in the North of Brazil. These regions are globally known as the poorest and the less industrialized places in the whole State of Brazil, meaning that are located 28% of the whole country's people producing only 14% of GDP[16]; the Northeast regions are the most levered in terms of debt[17]; the disproportion between the density population in the regions of North and South of Brazil, where the 40% is located in the South and just the 7% in the North. Even though the poverty rate decreased during the last years, these regions still demonstrate a high level of economy scarcity. Maranhão, which is one of the States where Equatorial Energia invested in, contributes less than 1% to the national economy[18].

So, the question is spontaneous, why had Equatorial Energia invested in the poorest and less economically advanced regions?

The first answer we would think could be the low level of labour cost. Many companies and investors implement the so-called FDI (Foreign Direct Investments), when a firm invests in a different country respect to the place it is located. This time, Equatorial Energia did an "internal" investment in the same country but in cheaper places.

Another interesting point is referred to natural power. Brazil needs to produce 6000 MW (MegaWatt) of energy in excess every year to satisfy the growing demand in the whole country. The solutions of the Brazilian Ministry of Energy were to generate 50% of it through hydropower, 30% though wind and the remaining 20% form gas and other sources. The strongest wind productivity is concentrated in the regions of Northeast especially in dry season when hydropower produces less, so the two energy sources are seasonally complementary. This is another of the reasonable motivation for which Equatorial Energia invested in such poor locations.

Equatorial Energia saw in the North-East the right place to spend its fund at the right time.

[16] https://www.economist.com/the-americas/2011/05/19/catching-up-in-a-hurry
[17] https://www.forbes.com/sites/kenrapoza/2014/01/05/brazils-poorest-cities-dive-deeper-into-debt/
[18] https://www.worldatlas.com/articles/the-richest-and-poorest-states-of-brazil.html

3.1.3 Equatorial Energia's Competitors in 2005

The position of CEMAR, owned by Equatorial Energia for the distribution of electricity, in the market context of 2005 was good enough to keep solidity to the previous statements it has been pointed out about the growth of the company. Equatorial Energia is classified as sixth in the list of the competitors in the Brazilian scene, as it can be seen from the picture below:

Company	Control	Net Revenues (R$ 000)	Energy Sold (GWh)	EBITDA (R$ 000)	EBITDA Margin (%)
CELPE	Neoenergia	1,603,646	7,860	388,362	24.2%
COELCE	Endesa	1,581,522	6,397	344,821	21.8%
CEMAT	Grupo Rede	1,233,464	4,006	322,201	26.1%
CELPA	Grupo Rede	1,124,792	4,661	284,398	25.3%
COSERN	Neoenergia	619,655	3,163	199,931	32.3%
CEMAR	**Equatorial Energia**	**665,444**	**2,793**	**188,578**	**28.3%**
SAELPA	Cataguazes	492,552	2,227	155,074	31.5%
ENERGIPE	Cataguazes	381,159	1,647	137,072	36.0%
CELTINS	Grupo Rede	265,661	932	104,226	39.2%
CEAL	Eletrobrás	468,795	2,159	85,795	18.3%
CEB	State Govt.	859,050	3,799	63,846	7.4%
CERON	Eletrobrás	452,418	1,439	10,177	2.2%
CELG	State Govt.	1,556,176	7,050	(3,084)	-0.2%
CEPISA	Eletrobrás	376,708	1,583	(25,908)	-6.9%

Source: Annual Reports of North/Northeast/Centre-West regions companies – Dec/2005 data

Analysing these firms from the top, the company CELPE (Companhia de Eletricidade de Pernambuco) in 2005 had about R$1 million more in Net Revenues respect to CEMAR, almost 3 times of energy sold in GigaWatt per hour, but more or less the same EBITDA margin. CELPE is under control of Neoenergia and as the name itself suggests, it operates only in the State of Pernambuco, Northeast of Brazil, so it could also not be considered a direct competitor of Equatorial Energia on large scale.

COELCE (Companhia Energética do Ceará) in 2005, was the second and the closer to the podium. The financials in the Report are almost similar, being both the largest electricity companies in Brazil. This company also operates in a Northeast region of Brazil, in the State of Ceará. Today the owner of this company is Enel, in fact its properly name is Enel Distribuição Ceará.

CEMAT and CELPA belonged to *Groupo Rede* and they had close values in Net Revenues, Energy Sold and EBITDA Margin. Both had the double in terms of Net Revenues respect to CEMAR and almost twice also in energy sold, higher EBITDA but lower EBITDA margin, meaning that the total revenues of CEMAR were higher than the ones of the two companies considered[19].

COSERN was just above CEMAR with close financial values. COSERN had slightly higher EBITDA but a percentage of EBITDA Margin higher in 4 percentage points, this could be explained by the smaller value of the Total Revenue of COSERN, with respect to CEMAR.

[19] Where EBITDA Margin = EBITDA/Total Revenue.

3.2 Equatorial Energia opens to the market

In 2006, Equatorial Energia's vision was "*to become the biggest electricity company with operations in Regions of North, North-East, Centre-Weast of Brazil and the best and more profitable electricity company in Brazil*", these were the exact words published on the *Manual de Conduta* from Equatorial Energia in 2006, year in which it became traded on the market.

During the beginning of 2006, Equatorial Energia viewed its possibility to expand its business operations and to grow its profitability by making a rite of passage to become public. There are some benefits that the company gains being private, firstly it is not obligate to the disclosure of financial and accounting statements, it is not directed by any rule or regulation different from the ones of the company itself. A private firm does not suffer from the dissemination and diffusion of its own information which could result profitable to competitors, dealer and/or clients. Being a private company means have less problems related to legality or any kind of authority, such as actions made by shareholders.

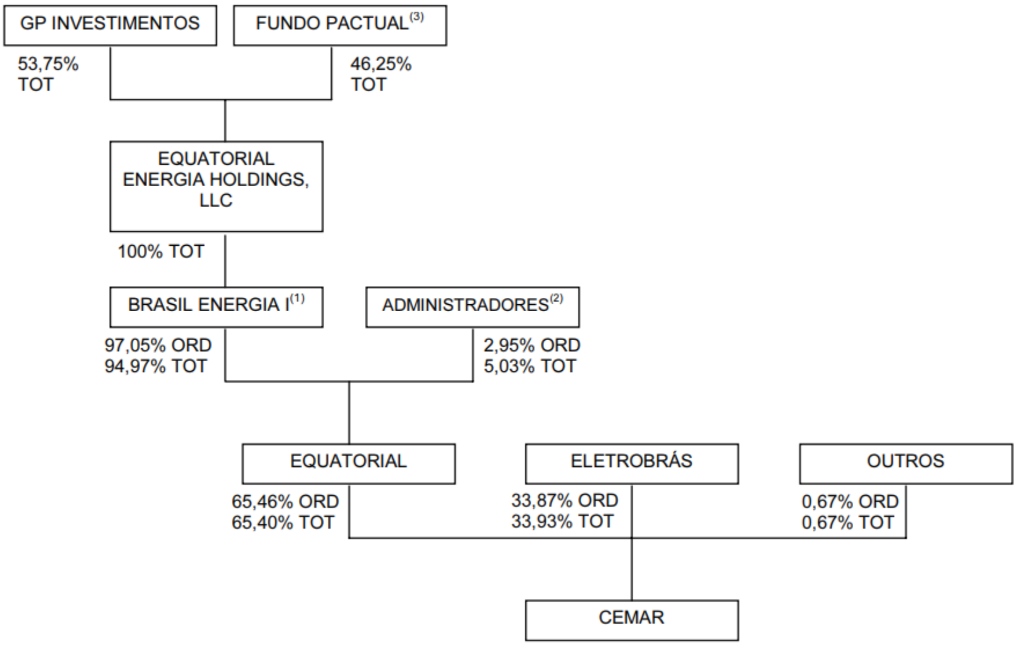
On the contrary, becoming public, a company must outline a Board of Directors who must report financial and accounting situation every quarter since the firm pass under control of regularized government figures, i.e. in USA all the public companies report their financial condition to the Securities and Exchange Commission (SEC). Moreover, a public firm must follow directed schemes from the competent government body, such as standard requirements and regulations. Becoming public, a company loses part of its own freedom, and this can be an advantage (or a drawback in other cases).

Doing the IPO in the circumstance of Equatorial Energia has been beneficial. Equatorial Energia was in the period of its company life to expand and to grow, this "jump" was made by the IPO improving large sums of money. Confirming this thesis, being a public corporation, Equatorial Energia would have benefited from lower interest rates when issuing debt since it would have been more "under the limelight" of investors and financial analysts than it was private. Besides, all the Merger and Acquisition paths would have been easier and more favourable when being public because, until market demand exists for the company, the latter can issue shares in the Secondary Offering, too. In parallel, the sales and the profits of a public firm increases thanks to the growth of its notability, a better view of its image and appearance and a transparent disclosure.

On 30th March 2006 the Board of Directors of Equatorial Energia did the last meeting before the opening to the market. They agreed on the Listing Prospectus that Equatorial Energia would have issued a primary and a secondary offering in the Brazilian market, specifically 12.800.000 new shares issued by Equatorial Energia on the primary market, while 19.600.000 shares issued from selling shareholders of the company, for a total of 32.400.000 shares. In particular, there were issued proportionally 1 ordinary and 2 preferred shares from Equatorial Energia to Itaú Bank S.A., which was acting as custodian by contract. Every share was sold to the market at a price of R$ 14,50 (US$ 6,78), so the whole worth of the IPO was R$ 469.800.000,00 (US$ 219.866.400,00).

The prospectus took also in account the Supplementary shares, that could have been until a maximum of 15% of the initial number of shares issued, action to be exercised from Fund Pactual until 30 days from the first negotiation.

The following sketch illustrates the company structure on 30th March 2006, before the Offering on the market was closed:



[20]

Source: Listing Prospectus Equatorial Energia, March 2006

In 2006, the Fund Pactual owned the 46,25% of the Equatorial Energia Holdings, and Fund Pactual was managed by Vinci Partners.

Looking below there are 3 tables, the first one on the left indicates the composition of the Equity of Equatorial Energia at 31th December 2005; the second in the middle was at the date in which the Prospectus was written (30th March 2006); the last table on the right was a projection of the shares after the market offering. (5th April 2006):

[20] English translation from top to down and from left to right: GP Investments, Fund Pactual, Equatorial Energia Holdings LLC, Brasil Energia I, Administrators, Equatorial, Eletrobràs. Others, Cemar.

	Quantity	Value (R$ mil)		Quantity	Value (R$ mil)		Quantity	Value (R$ mil)
Common	283.430.937	160.271	Common	89.835.220	299.469	Common	102.635.220	361.336
Preferred	283.430.936	160.271	Preferred	68.439.957	228.148	Preferred	94.039.957	351.881
Total	**566.861.873**	**320.542**	**Total**	**158.275.177**	**527.617**	**Total**	**196.675.177**	**713.217**

Source: Listing Prospectus Equatorial Energia, March 2006

From those tables it is noticed that the shares' quantity of the company decreased considerably, but this fact was compensated by the share value that doubled. From these figures it can be easily computed the Total Value of the company (Total Value = Stock Price*Number of Outstanding Shares). In the first case the worth of the firm was 178.497 billion, while at the Prospectus date it dropped to 83.508 billion and after the offering increased again to 140.272 billion.

The following Table shows the principal economic/financial information of Equatorial Energia with variations from 2005, pre-listing, to 2006, post-listing trimester:

	4T05	4T06	Var %	2005	2006	Var %
Net Revenue (NR)	200,8	220,8	9,9%	665,4	885,6	28,6%
EBITDA	69,3	98,1	41,7%	188,6	340,7	80,7%
EBITDA Margin (%NR)	34,5%	44,4%	9,9 p.p.	28,3%	39,8%	11,4 p.p.
Operating Profit	39,0	72,3	85,5%	114,2	243,2	112,9%
Operating Margin (%NR)	19,4%	32,7%	13,3 p.p.	17,2%	28,4%	11,2 p.p.
Net Income	179,1	47,8	(73,3%)	228,8	125,4	(45,2%)
CEMAR Investments	33,1	56,1	69,6%	102,7	136,9	33,3%
Direct Investments	52,6	60	14,1%	128,7	169,1	31,4%
Net debt consolidated	305	105	(65,6%)	305	105	(65,6%)

Source: Annual Report 2006 - Equatorial Energia[21]

The Net Revenues post-listing were positive with an increment of 28,6% with respect to 2005; all the other financials were positive too, unless the Net Income which decreased sensibly. The decrement in Net Income is explained by the fact that in 2005 the company had a huge positive wave of Deferred Taxes, while in 2006 they were negative and affected the Net Income diminishing it.

[21] http://www.equatorialenergia.com.br/arquivos/Equatorial_ER_20070305_port.pdf

3.3 After the IPO

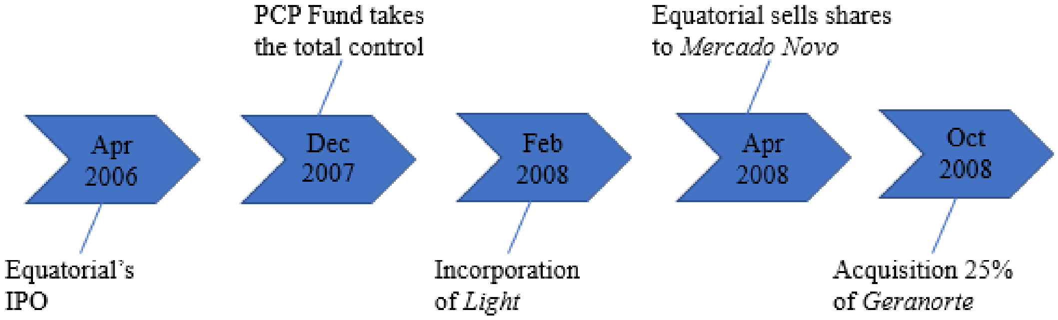
When a company goes public it has more responsibilities respect to its investors, shareholders, stakeholders and market in general. All the financials and the reports must be shown to the whole market scene, the firm has to respect the restrictions imposed by the institutions, but on the other hand, it has some benefits regarding, for example, the image of the company and the easier availability to leverage. In the case of Equatorial Energia, the IPO was expressed in an evolution of the company structure.

The first year after IPO was rather profitable considering that the total volume of energy distributed from CEMAR increased of 3.224 GWh, 10,5% more than 2006; the customers of CEMAR incremented too, of 6,6% more respect to 2006; the loss of energy saw a reduction of 1,1 percentage point in relation to 2006.

On November 2007, Equatorial Energia presented a restructuring plan to the market which incorporated 3 stages:

- The first step involved the movement of all the shares of GP Investments into Equatorial Energia Holdings (the company that controls Equatorial Energia), in this way GP Investments exited the company;
- The second stage was referred to the incorporation by Equatorial Energia of PCP Energia Participações. Doing this, Equatorial held 13,06% of Light and through a deal with its shareholders, Equatorial assumed the shared control of Light. The strength points of CEMAR and Light lie in the differentiated management of both, in the efficient operational performance and in the reduction of commercial losses;
- The last step regarded the migration of part of the company' shares to the *Novo Mercado* (New Market). It is a segment of public market created by the Brazilian government to encourage investments in stocks by domestic and foreign investors, improving the corporate governance of its publicly traded companies.

Those 3 phases were all implemented in the following years:



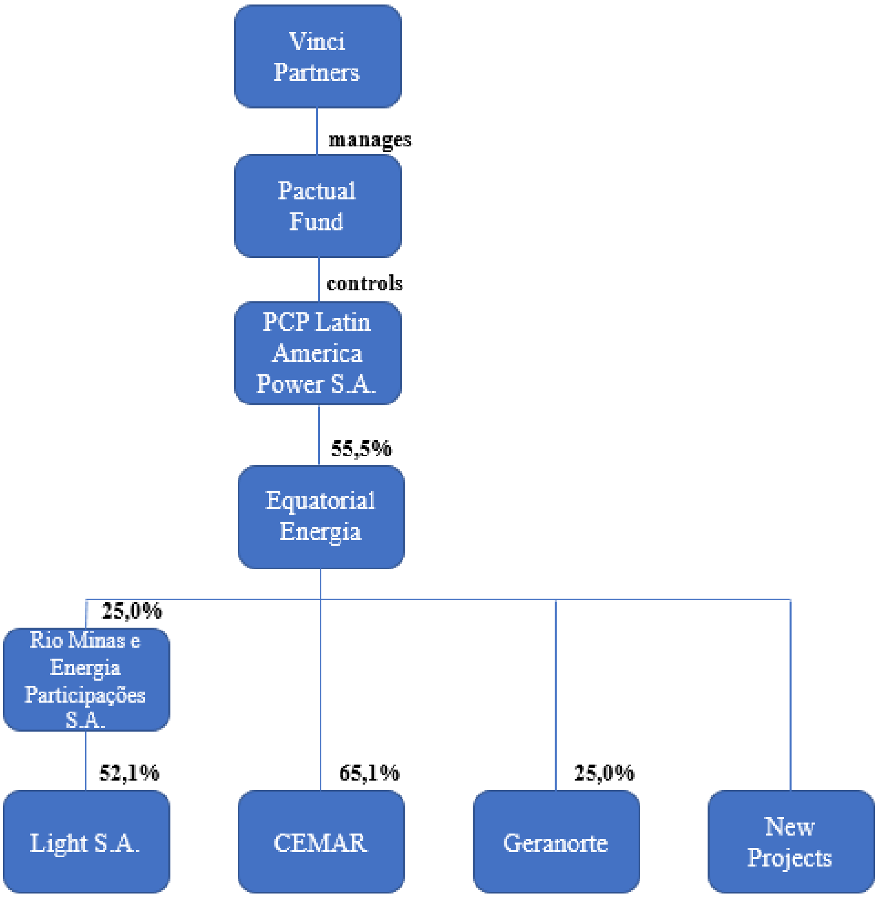
The Private Equity GP Investment, that initially was the main owner of Equatorial Energia, sold all its shares to PCP America Power Fund (PCP Energia) for R$ 204 mil (US$ 118 mil). Therefore, PCP Energia took the total control of Equatorial Energia and its distribution subsidiary CEMAR in the State of Maranhão.

PCP planned to list its shares on the São Paulo stock exchange BOVESPA's *Novo Mercado*, which required to improve the corporate governance standards. In the meanwhile, PCP had bigger businesses in mind, it wanted to make acquisitions in the power sector outside Brazil, as expressed Mr. Carlos Piani (CEO of Equatorial Energia and Co-Head of Vinci Partners). Piani in an interview affirmed that "Wherever there's a good opportunity for risk-adjusted returns, we'll be there […]", talking about investing in power assets on sale in Latin America, in particular in Argentina.

When Equatorial Energia passed in the hands of PCP Latin America Power Fund, the working area of Equatorial lost its geographical restrictions and its constraints in power growth, which previously was limited only to North and North-East of Brazil.

Just to refresh and to make the point, at that time (2007), Vinci Partners was managing Pactual Fund, which Fund in turn was controlling PCP Energia, and the latter was controlling Equatorial Energia.

Therefore, the company structure was the following:



Source: Financing and Operating Results on Equatorial's Website (4T07)

Comparing this company structure to the previous one pre-IPO, GP Investments disappeared completely and PCP Latin America Power S.A. (and so Vinci Partners) acquired the majority (55,5%) of Equatorial Energia; Equatorial continued to hold about the 65% of shares of CEMAR, being always majoritarian shareholder.

The total number of shares was 105.638.030 with a price per share of R$ 11,50, therefore Equatorial Energia's total value was R$ 1.214.837.345.

In the all company context, the firms CEMAR and Light had the higher returns given their diversification in operating and financing performances, while Geranorte was acquired to differentiate the generation sector. Specifically, in 2007 the situation for the three companies was the following:

CEMAR: in 2007, the oldest firm belonging to Equatorial Energia Holding handled with the distribution in the State of Maranhão; it had 1,4 million of clients (fourth in the North-East[22]), where almost 90% of residentials and the rest were commercials or industrials; the total energy sold in 2007

[22] Source: ABRADEE.

was 3.219 GWh (fifth in the North-East[22]), the majority sold to residentials again; the Net Revenues were R$ 1,2 billion (US$ 0,67 billion).

Light S.A.: it operats in the State of Rio de Janeiro with the distribution, generation and commercialization of energy; in 2007, it was the third distribution company in Brazil in terms of energy sold and the fourth in terms of clients' quantity[21]; the installed capacity generation was 852 MW; and the Net Revenues were R$ 8,1 billion (US$ 4,5 billion), where more than 80% came from the distribution segment.

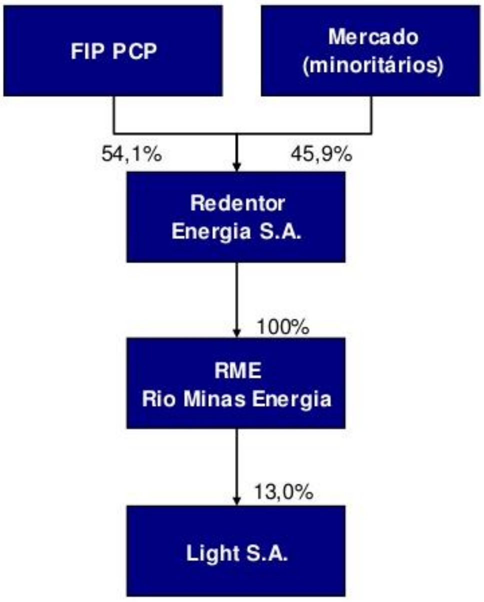
Geranorte: this new company was born to permits diversification in the market in which Equatorial Energia was working. The operation started definitely in 2010; it was built two thermoelectric plants in Miranda do Norte (in the State of Maranhão) with nominal capacity of 331 MW; the CAPEX of the project was about R$ 500 – 550 million (US$ 281 – 309 million ca), and Equatorial Energia invested just 25%, so R$ 125 million (US$ 70,2 million); the Net Income would have been fixed at R$ 136 million/year (US$ 76,4 million) per both plants.

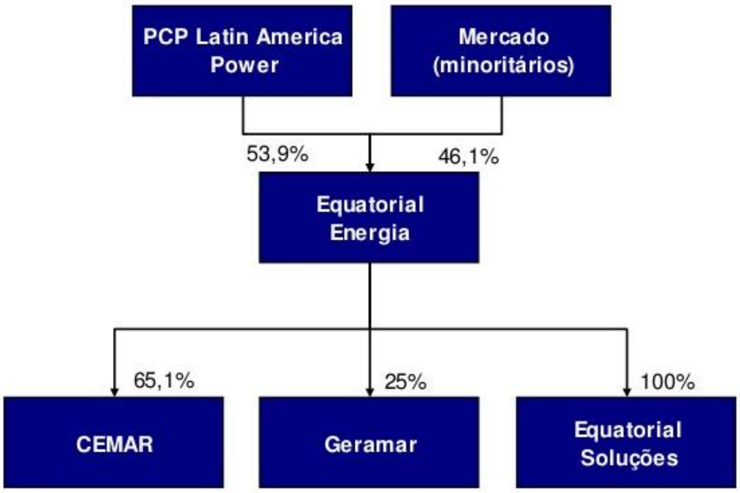
The acquisition of 25% of Geranorte was concluded on October 2008. Geranorte was at that time controlled from 3 funds: Equatorial Energia (25%), Fundo de Investimento em Participações Brasil Energia (25%) and GNP S.A. (50%) and its control was shared according with Shareholders' Agreement.

In December 2009, RME (Rio Minas e Energia), the company that held 52,1% of Light S.A., was divided in 3 parts and the one that acquired Light S.A. was CEMIG. All the shares of Light owned by RME were transferred to CEMIG and Equatorial Energia was left as the unique RME's shareholder. At the end of the transaction, CEMIG owned 13,03% of Light's shares and the same percentage was held indirectly by Equatorial Energia at a share price of R$ 29,54[23] (US$ 16,84).

Just one year later, in 2010, CEMIG bought all Light's shares from Equatorial Energia, holding now 26,06% shares. From that date on, Equatorial Energia had not anymore relationship with Light S.A. since all the participations of RME were transferred to another company called Redentor Energia S.A. In 2010, Equatorial Energia held its shares in CEMAR, Geranorte and in Equatorial Soluções, as the following sketch suggests:

[23] Source: http://cemig.infoinvest.com.br/enu/7170/Press_Release_Aquisicao_Light_AGC_Equatorial_ing.pdf

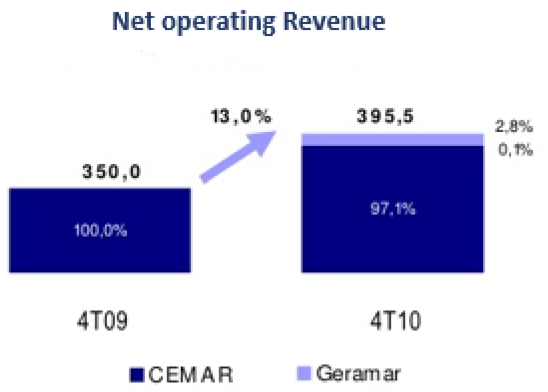


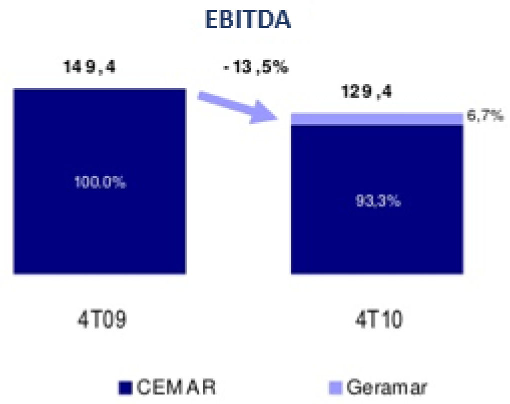


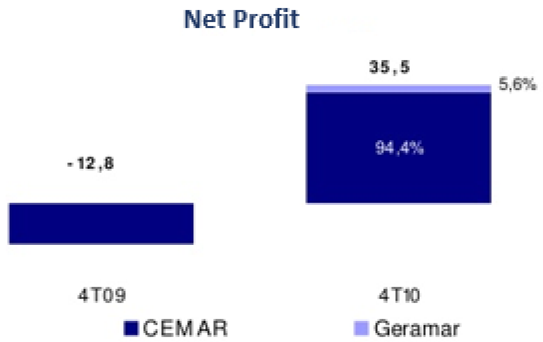
This was the company structure in 2010, when Equatorial Energia held 3 companies: CEMAR (65,1%), Geramar (25%) and Equatorial Soluções (100%).

The productivity scenario of CEMAR in 2010 was on average positive:

- The energy total volume produced reached 1.094 GWh in the fourth trimester 2010, with an increment of 11% respect to 2009;
- The total loss of energy in 2010 represented 22% of demanded energy, 3.2 percentage points above 2009;
- The Net Operating Revenue increased to R$ 395,5 million (US$ 237,7), 13% more than the Net operating revenue of the previous year, that reflects an increment of 9,8% of CEMAR and the beginning of Geramar (also known as "Geranorte") commercial operations;
- Equatorial's consolidated investments were R$ 126 million (US$ 75,7), with a loss of 13,9% respect to 2009, given the conclusion in construction of Geramar in 2010;
- The Board of Directors approved on March 29th an increase of capital with 400.347 more shares. With this improvement, Equatorial was represented in 2010 with 109.226.672 ordinary shares;
- In the same reunion was also approved the distribution of dividends for R$ 196,6 (US$ 118,1) million, equivalently to R$ 1,80 (US$ 1,08) per each share;
- Other financial information regarding CEMAR are shown and can be observed from the column graphs below.







Source: Equatorial Energia's Website[22]

CEMAR was the first and the oldest company belonging to the Equatorial group, it was the most efficient too as it can be checked from the financials above.

3.3.1 Successive Equatorial Energia's acquisitions

Sol Energias

In 2011, Equatorial Energia expanded its horizons increasing its control in energy companies across Brazil.

The holding acquired Sol Energias Comercializadora de Energia S.A., also known as *Sol Energias*.

Sol Energia is an electricity commerce company, it works in the city of Rio de Janeiro and in Campinas (State of São Paulo). It manages the buy/sell of conventional energy, the buy/sell of Biomass and wind energy with different kinds of contract for clients (short/medium/long term). The company also performs with financial agreements such as Collars, SWAPS, trying to ensure to its clients the most alternative and original solutions, with low global costs and filling all the customers' needs. Besides, the company operates in the development and implementation of innovative projects and acts as a consultant for Brazilian energy institutions.

Equatorial Energia became majoritarian shareholder buying 51% of Sol Energias' total capital. The total amount investment was R$ 6 million (US$ 3,21) and was realized after the transformation of the interested firm in a limited company (in Portuguese Sociedade Anónima, S.A.). In this event were subscripted 10.200 new ordinary nominative shares, without nominal value and issued by Sol Energias[24].

With this new investment Equatorial Energia would have operated in the energy commerce and in the services segment too, increasing its slice of knowledge in the electric market.

Given the relatively low total value of the investment, the holding believed in the high perspectives of growth of acquiring such a small company.

Moreover, the two companies decided to combine their businesses because they both have big experience and credibility in the commerce of energy market; due to their agility in the decision process and personalization in solutions for clients, which is fundamental for a competitive and volatile market such as the Brazilian; given the strong reputation and financial solidity of the holding Equatorial Energia, Sol Energia could benefit from it since its smaller business; Equatorial is hand by hand acquiring more energy companies in the same field but that operate in different sectors, in order to increase diversification and synergies among firms and decrease the total risk; another strategy of the holding is to align the interest rates of the long-run in the partner companies to decrease them as much as possible.

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[24] Source: http://www.equatorialenergia.com.br/arquivos/110805%20Fato%20Relevante.pdf

Vila Velha

Vila Velha Termoelétricas Ltda. is a company that offers energy generation services in the State of Rio de Janeiro.

On February 2012 the Board of Directors of Equatorial Energia announced to the market the approval of the acquisition of 50% of Vila Velha Termoelétricas' equity. The total value of the investment was R$ 3,75 million (US$ 1,83) through the purchase of 100.000 Vila Velha's shares.

According to the sources, the contract should refer to the acquisition of a project composed of the Vila Velha's Thermoelectric Complex. This project is constituted of 4 plants with a total energy power of 600MW that run through natural gas, to be implemented in the State of Espirito Santo (Brazil).

CELPA

Centrais Elétricas do Pará, also known as CELPA, is a Brazilian energy generation and distribution company that operates in the State of Pará, in the North of Brazil. It distributes energy across 144 municipalities in the whole State, totalizing 7,5 million of clients, through the implementation of 1.960.000 consumer units.

In 2012 CELPA was controlled by Rede Energia group and at that time was in a process of judicial recovery. After almost 2 years of negotiations with CELPA, the holding J&F arrived too late leaving the place of buyer to Equatorial Energia. The latter showed its interests in CELPA from the end of 2011 and formalizing it few months later, in June 2012.

Equatorial Energia symbolically paid R$ 1 (US$ 0,48 cents) for 39.179.397 CELPA's shares, representing 65,18% of voting capital and 61,37% CELPA's total equity.

The answer to this abnormal low price is that CELPA was in serious financial difficulties, with more than R$ 300 million (US$ 146,4) of tributes[25] to be paid to the State of Pará and with R$ 3 billion of debt to banks and suppliers. Given this situation, the contract stipulated between CELPA and Equatorial Energia had firstly to be approved by two institutions, the Aneel (Agência Nacional de Energia Elétrica) and the Cade (Conselho Administrativo de Defesa da Consorrência).

[25] Those tributes in Brazil are called ICMS (*Imposto sobre Circulação de Mercadorias e Serviços*), which literally translated is "Services and Merchandises Circulation Tax". It is a tribute to be paid to the State for the added value of the circulation across the territory of goods and services (a kind of the Italian "IVA").

In July 2012 the CFO of Equatorial Energia, Eduardo Haiama, affirmed that the CELPA's case was much more complex than the CEMAR one, given that the implementation area was in the middle of the Amazon forest.

The contract was approved and concluded at the General Assembly between CELPA's creditors on the first November 2012 without any disclosure of financial details.

The acquisition of CELPA from Equatorial Energia was a good new for CELPA's creditors and for the market as whole. The creditors benefited from this agreement because it increased the chances to receive back their payments in the easier and agiler way, while the market could continue to invest its funds in the company since from that moment on was acquiring more value and fidelity given the entrance of the holding's big name.

Moreover, the acquisition was an important turning point for the company itself since Equatorial Energia was able to reach some conditional agreements with several creditors that account for most of CELPA's liabilities, these included salary increases, reduction in interest payments and debt forgiveness.

Actually, for Equatorial Energia was not the first time in its history to recover electric companies in financial difficulties. As it is written earlier in this chapter, the holding bought the firm CEMAR in 2006 when the latter was in a period of financial intervention from Aneel. Today CEMAR is one of the core companies of Equatorial Energia.

3.3.2 Equatorial's Follow-On

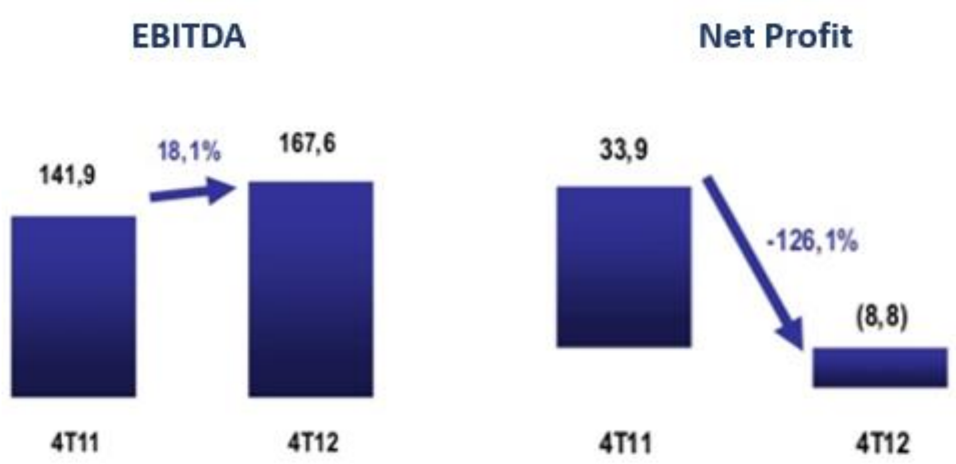
Analyzing the definition, the Follow-on offering is 'the issuance of stock shares following a company's initial public offering' (IPO)[26]. Basically, there are 2 kinds of follow-on offerings, the diluted and the non-diluted ones. The first type considers the decrement of company's earnings since utilises the issuing of new firm's shares, while in a non-diluted follow-on offering the earnings per shares of the company remains always the same as before since the shares in consideration already exist into the market. In this last scenario of follow-on strategy, it usually happens that existing shareholders of the company bring already issued shares to the market to sell them and to get the proceeds.

In the diluted case, the price of the follow-on offering is given from the market and usually it is lower than the current price of the company but closer to the market price.

Equatorial Energia approved the Follow-on in December 2012. Through this increase of capital strategy, the holding company reached a bit more than R$ 1,1 billion (US$ 0,53) in liquid sources with the emission of new shares for R$ 16,00 (US$ 7,8) per each.

Just one month later, on January 2013, the Board of Directors of Equatorial Energia approved another increase of capital through capitalization of R$ 234,8 million (US$ 99,3) of credit detained by BNDESPAR[27] to the company. Therefore, the equity of Equatorial Energia in 2013 was represented by 198.447.352 common shares.

After all these changes in the company structure and in the composition of capital, the financial results, from the last trimester 2011 to the last one in 2012, of Equatorial Energia were the following:

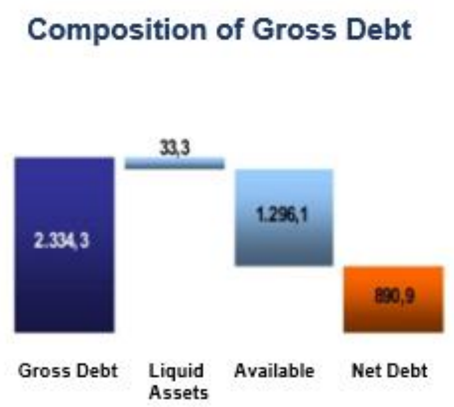


[26] Definition from Investopedia: https://www.investopedia.com/terms/f/followonoffering.asp
[27] Acronym of "Bndes Participações S.A.", it is the investment arm of Brazil's national development bank, BNDES.

Source: Equatorial Energia's Website

Consolidated EBITDA increased of 18,1% from 4T11 to 4T12. In particular, CEMAR's trimestral EBITDA grew of 10,5% reaching R$ 147,7 million (US$ 72,07) while CELPA contributed with an EBITDA of R$ 20,9 million (US$ 10,1).

Regarding the Net Profit, the holding had a total loss of R$ 8,8 million (US$ 4,3) with a growth decrement of 126,1% due to the beginning of CELPA's consolidation in the companies' group. The adjusted Net Profit of CEMAR was R$ 52,7 million (US$ 25,7) with a growth of 3,9%. The results in Net Profit of CELPA for November and December were negative with a loss of R$ 98,3 million (US$ 47,9).



Source: Equatorial Energia's Website

The Net Debt-EBITDA ratio remained slightly constant in a range of 2,0 – 2,4 for all the trimesters and the impact of the Debt was heavier on the company only in the last trimester 2012.

Although there is 61,37% of CELPA's gross debt, its EBITDA proportional contribution to the consolidated value of Equatorial Energia was just referred to the months of November and December.

3.4 Vinci Exits Equatorial Energia

When GP Investments acquired Equatorial Energia in 2004, it was considered one of the worst electric companies in Brazil. The following year entered Vinci Partners that managed PCP Fund, too. Followed intense years marked of IPO, acquisitions, tempted acquisitions and other negotiations. Equatorial Energia grew exponentially over the length of time between 2005-2006, years in which was acquired by Vinci, and 2015, when the Brazilian Private Equity exited.

In February 2012 started the first sells of shares: PCP Fund sold 10% of Equatorial Energia. In 2012 the Fund had a total of 22,9% of shares in Equatorial, so it reduced its position to 12,9% in the electric company. This first offering started with a sell of 6 million of shares and was concluded with 20 million, with a final circulation of money of R$ 520 million (US$ 253,7). The shares were sold at R$ 26,50 (US$ 12,9) per each.

The second major shareholder of Equatorial was Squadra Investimentos with 15,6% in the holding electric company. In February 2012 Squadra became the largest owner of Equatorial with more than 20% of shares. While other minor shareholders with about 5% of ownership were IFC (International Financial Corporation), Verde Asset Management, ARX Investments and BTG Pactual Asset Management[28].

The second step was done on 20th May 2015.

The Fund PCP sold all the shares it had in Equatorial Energia in the market for R$ 700 million (US$ 176,4). The operation started with a price per share of R$ 32 (US$ 8,06) and closed to R$ 33,91 (US$ 8,5). According to market sources, national and foreign investors bought the shares offered. The international appetite raised for the Brazilian electric company shows the change in the investor vision which were looking at the Brazilian market in a different and positive way.

The sell was realized from the Brazilian financial company BTG Pactual.

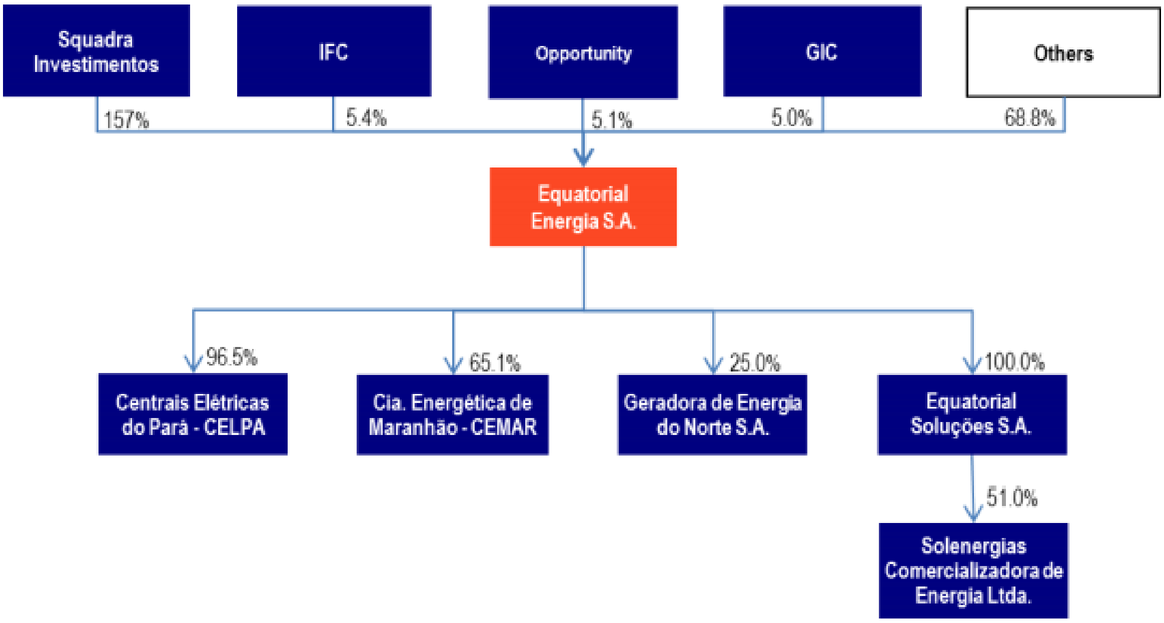
The final portfolio structure when PCP Fund exited the company was the following:

Shareholder	Shares	%
Squadra Investimentos	31.176.900	15,70%
Internatinal Financial Corporation	10.625.000	5,35%
Opportunity	10.067.478	5,07%
GIC	10.001.775	5,04%
Demais Minoritarios	136.717.314	68,84%
Total	**198.588.467**	**100,00%**

[28] Source: http://fusoesaquisicoes.blogspot.com/2015/02/equatorial-pcp-vende-10-da-empresa.html

Source: Equatorial Energia's Website

Which could also be seen from an organogram with all the percentages of ownership in the companies:



Source: Equatorial Energia's Website (Earnings Release 4Q15)

The detailed financial situation of Equatorial Energia at the end of 2015, when Vinci Partners left the company, was moderately positive.

CEMAR's total energy volume reached 1,598 GWh in the last semester 2015 and comparing it with the last semester 2014 it increased by 4,5%. CELPA's volume also incremented of 12,2% with a total energy amount of 2,413 in this last semester.

Regarding the EBITDA, the consolidated one grew of 51,5% from 4Q14 to 4Q15, mainly thanks to the reduction in CELPA's loss of energy and to the increase in billed volume in both CELPA and CEMAR.

The total investments instead decreased in percentage of 32,4% from 4Q14 to 4Q15, when the amount invested was R$ 329 million (US$ 82,9). While the net results increased considerably from 2015 to 2015 of 89%, where in the last quarter reached R$ 244 million (US$ 61,5).

The financial data 2014-2015 are all resumed in the following table:

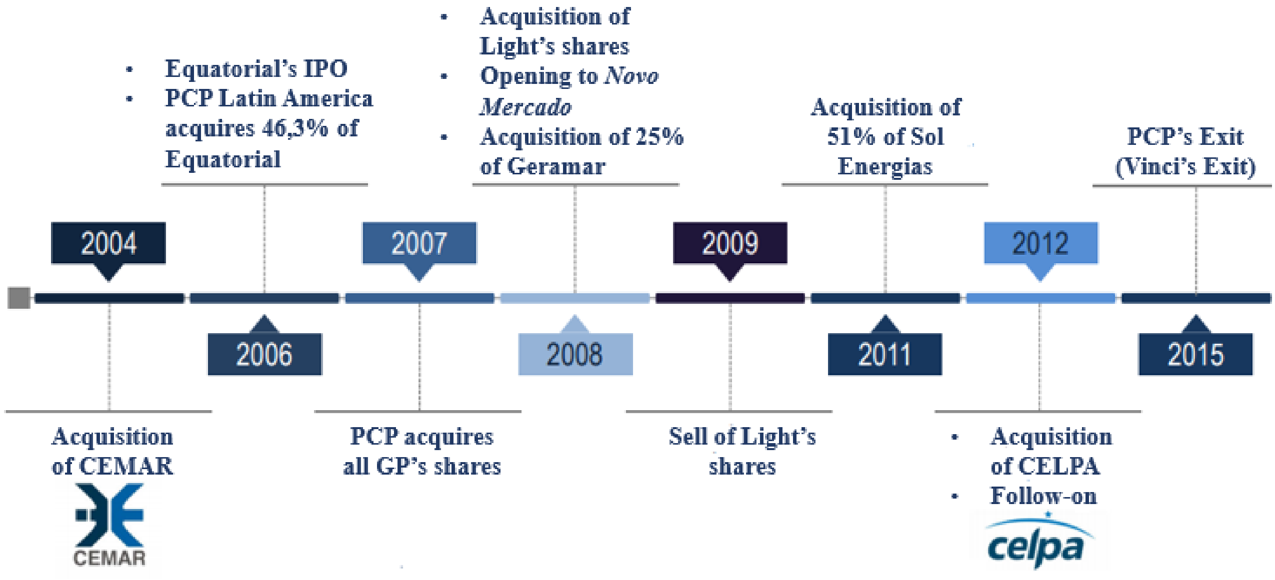
FINANCIAL DATA (R$MM)	4T14	3T15	4T15	Var.	2014	2015	Var.
Total Net Operating Revenue	**2,425**	**1,862**	**1,875**	*-22.6%*	**6,773**	**7,135**	*5.3%*
Accounting EBITDA	**777**	**365**	**333**	*-57.2%*	**1,299**	**1,176**	*-9.4%*
Regulatory EBITDA	**194**	**365**	**333**	*71.5%*	**1,117**	**1,176**	*5.3%*
Regulatory EBITDA (LTM)	**251**	**323**	**381**	*51.5%*	**950**	**1,184**	*24.7%*
EBITDA Margin (% net revenues)	*10.4%*	*17.3%*	*20.3%*	*95.9%*	*14.0%*	*16.6%*	*2,5 p.p.*
Net Income	**526**	**80**	**143**	*-72.9%*	**638**	**808**	*26.8%*
Profit Margin (% net revenues)	*21.7%*	*4.3%*	*7.6%*	*-14,1 p.p.*	*9.4%*	*11.3%*	*1,9 p.p.*
Net Income per Share (R$ / share)	**4.82**	**0.41**	**0.72**	*-85.1%*	**5.84**	**4.07**	*-30.2%*
Investments							
CEMAR	99	78	128	*29.8%*	316	340	*7.6%*
PLPT (CEMAR)	10	22	30	*198.8%*	72	76	*6.3%*
CELPA	307	102	99	*-67.7%*	699	481	*-31.2%*
PLPT (CELPA)	71	57	70	*-0.8%*	220	219	*-0.5%*
Geramar	0	2	2	*680.7%*	1	9	*1223.3%*
Total	487	261	329	*-32.4%*	1,308	1,126	*-13.9%*
Net Debt	**1,543**	**1,488**	**1,647**	*6.7%*	**1,543**	**1,647**	*6.7%*
Net Debt / Regulatory EBITDA (LTM)	**1.4**	**1.4**	**1.4**	-	**1.4**	**1.4**	-

Source: Equatorial Energia's Website (Earnings Release 4Q15)

The ambiguous situation for which the variation from one year to the following are different (e.g. Total Revenues, Investments, EBIDA, Debt level) can be explained for the high initial volatility of the holding due to the several acquisitions of companies in financial difficulties. These events, mainly in the first years after the acquisition, could influence in different ways the consolidated results of the company.

Equatorial Energia was becoming acknowledged for its strength in recovering firms in financial distress, in fact, other than acquiring CEMAR in 2004 and CELPA in 2006, it was trying to buy part of *Grupo Rede* in 2004 when the Group had R$ 5,7 billion (US$ 2,14) of total debt. The agreement was proposed from Equatorial and CPFL, the second largest non-state-owned electric company in Brazil. It was not concluded because the position of those two companies was replaced from another one named *Energisa*. The latter offered a payment of R$ 1,95 billion (US$ 0,73) to creditors and R$ 1,1 billion of investments, while CPFL and Equatorial Energia just R$ 1,8 billion (US$ 0,67) for creditors and R$ 773 million in investments. That is the reason why the contract was not concluded with Equatorial Energia, in this case the richer company won the "hot potato".

The whole history of the Holding Equatorial Energia from the acquisition to the exit of PCP Fund is shown in the main passages from the following timeline:



Source: Equatorial Energia's Website (2016)

2006 was the year in which the Fund PCP, managed by Vinci Partners, acquired Equatorial Energia. The PE experienced several events over the years that brought the company from a low level of relevance and significance to a high level on the Brazilian market itself. The company expanded sensibly outside in the electric sector and inside the firm itself, acquiring 4 different companies and becoming majoritarian shareholder in almost all of them.

The path followed by Equatorial Energia was not common or banal, on contrary it can be observed a case of high capacity in the management to invest and divest in the right moment and with the right rationality.

3.4.1 PE's Exit Strategies

The Harvest strategy is the last stage of a Private Equity process and usually it is done between year 4 and 10. In the case concerned this written the PE exited after 9 years.

Following the definition[29], the Harvest strategy is a reduction or a termination of investment in a product/product line/business/company in order to maximize their profits. Specifically, in the lifecycle of a product, this stage is called "cash cow" to indicate that a product does not need to be invested anymore, that the assets must be paid off and that it must be exploited as much as possible.

Coming back to the PE world, Harvesting is literally the *generation of cash/stock from the sale or IPO of companies in the portfolio of investments*[30].

An investment fund can exit from an investment in 4 ways basically:

- Sell shares to the market;
- IPO (if the company is not already listed);
- Dividend Recapitalization;
- Mergers and Acquisitions.

The first option is the one utilized from the Fund PCP and it is the easier too. The PE makes a change in ownership of the target company deciding to sell all immediately or do it in part and complete the whole process in sequential steps. The fund needs a buyer to whom sell its part of ownership and then give it under form of stocks or money. The PE could sell to another PE firm or make a secondary buyout[31] for a medium or large portfolio company.

The second choice for a PE firm is to make an IPO, so make the company tradable on the market. This option can be done only if the company is not already listed, otherwise it is referred to the first alternative.

The dividend recapitalization option is the most recent developed strategy of exiting. In this occasion the target portfolio company pays a preferred dividend to the PE firm in order to repay all the initial investment it did. Most of the times the company needs to raise more money issuing additional debt.

The last possibility is to make a M&A deal. In a Merger there are different companies that negotiate the amount of capital to be acquired to obtain their percentage of ownership, while in an Acquisition there is an acquiring firm that bargains with the target firm the purchase price of the latter. Usually,

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[29] https://www.investopedia.com/terms/h/harvest-strategy.asp
[30] Definition from NASDAQ's website: https://www.nasdaq.com/investing/glossary/h/harvest
[31] A Secondary Buyout is when a financial sponsor or a PE sells its part of investment in a company to another financial sponsor or PE firm.

in a M&A deal the target firm loses the authority of the company while the acquiring firm gains it. Those kinds of deals are longer in time since lot of steps need to be filled out: find the potential buyer and understand the strengths/weaknesses of it, have a structure organization, which are the advantages/disadvantages of the target firm.

4. The Presence of a PE in a Company

When a firm is growing fast, or it is going to grow fast in the immediate future, consequently has low level of Cash Flows, large cash, little amount of debt and high human capital, the firm could be an excellent target for a Private Equity. PEs are always interested in those kinds of companies to invest in and exploit the potential business to let grow the firm in the best possible way and make profit from them. This is the primary objective of a PE fund.

A PE uses intelligently their analytical skills and capabilities. When a PE acquires a company, it buys usually for maximum 10 years after its initial investment, therefore in these years the PE finds all the possible ways to generate short/medium-term profits. Those actions could go on conflict of interests with the owners, the managers or the shareholders of the company who are more interested in the long-run.

4.1 From PE's point of view

It is shown from empirical studies and researches, that when a PE acquires a company, it must follow some practical rules of conduct[32] to handle in the best way possible its invested funds. The first rule is to define an Investment thesis in which it is demarked at least a 3-5 year plan, a statement in which the PE clarifies how and in which terms will make the target business more valuable during the holding years. Basically, the Investment thesis is a sketch that is used as a guideline for all the management decisions that will be taken within the company. Those theses could also be very simple but very useful as happened in the case of American PE Berkshire Partners when it acquired Crown Castle International Corporation in 1994. The provider of shared communications infrastructure Crown Castle wanted at that time to purchase a cellular telephone transmission tower from a telecommunication company, but it was in a period of lack of money to expand its business, so they were limited in a single metropolitan market. The PE Berkshire Partners saw this opportunity of replicating the business model of the telecommunication company as an excellent investment thesis. The PE made an initial investment of US$ 65 million buying 2 telephone transmission towers in other markets and then replicated this model across USA, United Kingdom and Australia. Just having this simple idea and implementing it, Berkshire Partners gained high profits from worldwide.

Usually, PE firms have a deeper focus on growth rather than on cost reduction, because it is what lets to higher investment returns.

[32] It is what affirms Paul Rogers, Tom Holland and Dan Haas in an article called "Lessons from Private Equity Masters", published on the Harvard Business Review.
https://hbr.org/2002/06/lessons-from-private-equity-masters?referral=03759&cm_vc=rr_item_page.bottom

The second rule of conduct is to avoid excessive measuring. Rogers, Holland and Haas affirm that "The top PE firms have steadfastly resisted measurement mania" meaning that too many measures such as ratios or percentages or proportions do not help, actually complicate management discussions. Large PEs base their focus on few financial indicators, the most important ones in measuring the firm's value.

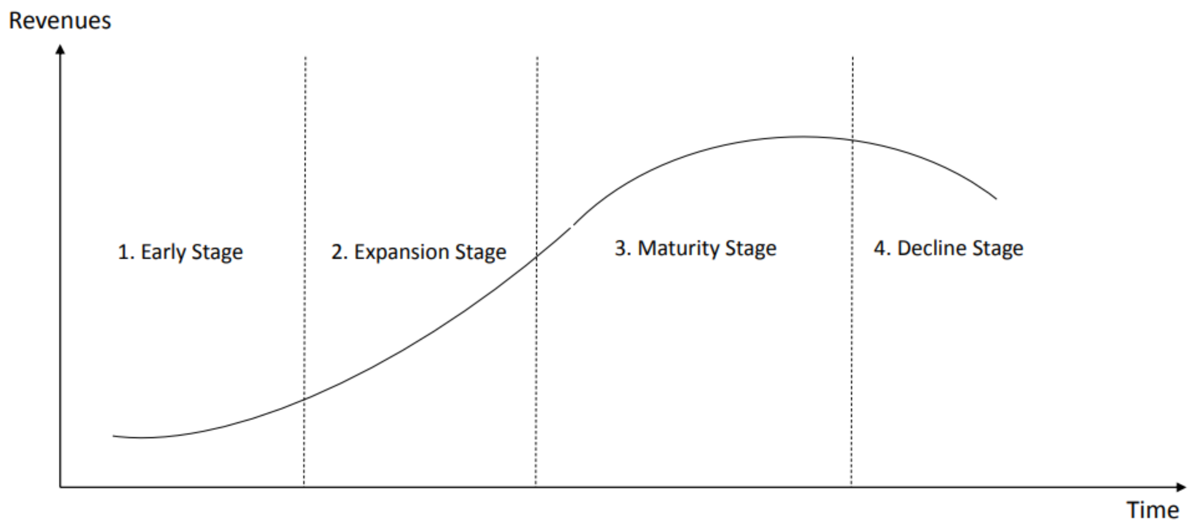
Coming back to Berkshire Partners, when it merged up two industrial machines companies, it only took care on 2 measures of merger success: cash flow and synergy effects. All the rest was secondary and left at its time. Moreover, PE managers prefer look at cash rather than earnings of a company since the first is a fair benchmark to consider, while earnings can be manipulated; besides, they also prefer to compute the return based on their invested capital, which reflects a true realization, rather than on return on sales or on capital employed which could result unclear measurements for the PE itself. Consequently, PE firms have a greater focus on estimations that better link the equity portion of their managers' compensation to the outcome of managers' units, to have a more transparent way of understanding their direct results.

The third discipline is to Work the Balance Sheet. Usually PEs support a high debt-equity ratio, having a high use of leverage to finance their activities. This big use of debt helps to keep the managers deeply focused on their aim but, on the other hand, submits the PE's managers to a harder work because they have to look at the balance sheet as a dynamic thing and not as static one. Managers must be clever enough in maintain dynamically the level of leverage at the optimal and most efficient point in order to maximize their proceeds.

So, it is common use for a PE to centre its attention on Cash Flows, on the high use of debt, which is translated in financing and in tax advantages, such as tax shield. It is almost obvious think that the core activity and the most important source of return for a PE comes from its practise of buying a business and, after applying on it some activities to improve its performances, sell everything. This is the core competence of a PE's success. This process is called in financial terms *Buy-to-Sell* approach.

In sums, this strategy is based on simple rules of *Buying* when both the PE and the company are ready; and to *Sell* after some years that depend on many things such as the market trends, the financials of the company or if the PE found or not a good substitute.

Normally, the stages that a PE experiences from the beginning and through those years are the ones represented from the following graph:



Source: PE Strategies by Ascanio Rossini[33]

- *Early Stage*: it is the first step and it is the moment on time in which PE acquires the company. Before acquiring, the PE makes a market analysis to find out companies that are going have the highest potential for above-average returns in the future;
- *Expansion Stage*: in this phase the PE press the company for new investments to expand its businesses, to restructure operations, to enter new markets, to finance new mergers or acquisitions. Thanks to all those activities the company grows in revenues, or at least it is what the PE is going to expect. If everything goes right, the curve of proceeds should be as it is shown in the cartesian axes;
- *Maturity Stage*: it is the length of time in which naturally the revenues reach the maximum of their expansion and start to get flat. The PE begins to collect its profits and starts to find on the market its next substitute which is going to buy its part of capital in the company;
- *Decline Stage*: the revenues are declining, and the PE is close to exit the company. From that moment on it is not gaining anymore or just a little percentage.

[33] http://static1.squarespace.com/static/55f823dde4b03fd1bd687c38/t/56ddb14cf85082e7fcd055ca/1457369422311/PE+Strategies+REV.pdf

4.1.1 Reflecting the Theory in the Case Study: from Vinci Partners' point of view

The same 4 stages described in abstract form above, can be applied to the Case Study on Vinci Partners and Equatorial Energia:

- *Early Stage*: As it can be deduced from the previous chapters, when Vinci Partners indirectly acquired Equatorial Energia (through the Fund PCP) in 2006, the PE saw in it a suitable condition for investing its money. At that time Equatorial Energia was not already listed but was making all the preparation for that; CEMAR was the only electric company acquired by the holding and was in difficult financial situation. Vinci Partners, after studying the Equatorial Energia's case, trusted it. It was a kind of bet for the PE since it did not know what will have been the results and whether it will has been a winner or a loser. 2006 was a decisive year in which Vinci Partners decided to handle this investment and to bring it to the triumph.
- *Expansion Stage*: this phase goes from year 2007 to 2011.

  One year later that Vinci Partners entered the company through PCP Fund (2006), it did not lose other time and acquired all the shares of GP Investments, the Investment firm that restored the Equatorial Energia complex in 2004.

  In 2008 started the Expansion process, Equatorial Energia bought shares of the Brazilian electric company Light; it acquired one fourth of Geramar; it opened to *Novo Mercado*. 2011 saw the acquisition of another firm, the energy commerce company Sol Energias.

  Just in 4 years, Equatorial Energia dilated its business buying shares in 3 different companies which helped it to diversify its portfolio structure, it opened to another market and eliminated an investment fund buying all its shares. Those were high profitable years for the Holding.
- *Maturity Stage*: this period goes from 2011 to 2012.

  In 2012, Equatorial Energia made one of the most important transaction acquiring the electric generation and distribution company CELPA. As it is still known, the electric firm was in financial distress and the Holding helped to restore and reorganize it. CELPA operates in the whole State of Pará, in the Centre – North of Brazil and close to the Amazon forest, which is a very smart place to invest in electricity given its high potentials born from the forest itself.

  In the same year, Equatorial Energia decided to increase its capital making a *Follow-on*. This was a good new for investors because they saw in Equatorial Energia a large company that arrived at the point of expand its funds.

  2012 was the last important and profitable year, it was the maximum peak year for the Holding before starting the last phase.
- *Decline Stage*: it goes from 2012 to 2015.

After reaching the peak in 2012, Equatorial Energia stopped its acquisitions in electric companies and its expansions in capital or in other markets. In this last stage of 3 years, Vinci Partners was trying to get off the business. It is a delicate phase since Vinci had to find another deserving PE to take the seat it held for 9 years.

Unfortunately, PEs does not disclose their financial results to public for different and fair reasons. Therefore, it is not possible here to understand specifically which the total profit has been gained from Vinci Partners. It could be attested for sure that it has been positive just looking at the revenues of the Holding Equatorial Energia, which will be shown later in the chapter.

4.2 From Company's point of view

In the today's scenario of a globalized and competitive market, it is very hard for a company to have success while improving its productivity could be crucial. Achieve it could involve some management and strategic activities to exploit economies of scale, economies of scope and use in the most efficient way the equity, the time and the ideas.

One way to capitalize and to obtain positive results in company's productivity and therefore in its profits, it is to sell part or all the shares to a Private Equity. PEs affect companies' productivity helping them to exploit their existing businesses and to find out new ones in order to maximize their returns gained from their portfolios. In this subject, both the PE that acquires a company and the company itself go in the same directions: they want to improve company's performance.

Most of the researches that study the relationship between PEs and acquired companies find a positive connection between PE participation and company outcome. Taking an example, it was made a research by Ernst & Young in 2012[34] which looked at 473 firms just exited from PEs in Europe between 2005 and 2011. This study figured out that the participation of PEs in the life of those interested companies was positive since it increased the average per employee EBITDA by 6,9%.

Another research from Davis et al. made in 2009[35] analyzed USA companies between 1980 and 2005. It found out that in periods of credit crises, the productivity growth in PE-targeted firms was higher by 5,2% rather than non-PE-targeted firms, taking the values after 2 years the PE invested in the target company.

Again, Kaserer that made an empirical research in 2011, studied the effect of leverage on the investment returns of 322 European companies acquired by PEs between 1991 and 2007. Kaserer focused on this particular point because, as it is known, when a PE invests in a company, the large use of debt plays a central role. The study conducted to the following results: about 2/3 of overall returns coming from company's activities are not produced by leverage effect but from other ones.

Another examination regarding the effect of PEs on companies' outcome was made by Cressy, Munari & Malipiero in 2008 and was written down in a paper called with an oxymoron *Creative destruction?*[36]. The research analyzed a pool of 132 English firms over a length of time between 1995

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[34] https://www.investeurope.eu/media/12929/Frontier-Economics-Report.pdf
[35] https://www.investeurope.eu/media/12929/Frontier-Economics-Report.pdf
[36]
https://poseidon01.ssrn.com/delivery.php?ID=104119098102024007124073092010106007042068069003049020126090018087121114103005095028042013055035009000054127073100070084065066102052026003014069083069110029094088068076064112027085016003112065091108091074065023099090066099110080123095008098074108031&EXT=pdf

and 2000, where 48 were PE – target firms and the last 84 were not impacted from PEs. In the research was utilized a loglinear employment regression for the next 5 years after the buyout. In the first year after the acquisition, there is not too much difference between PE – target firms and non – PE – target firms, but in the successive years it is shown from results of the regression that the firms involved with PEs accuse of job losses. In the first 4 years the unemployment in the company increases from 7% to 23%, but from year 5 on the employment starts to increase again, rebalancing the situation. The authors of the research called the first years after the buyout a period of "rationalization" in which the company needs to stabilize itself with respect to its owner, the PE.

One more study was conducted from Ernst & Young (2012) testing European companies acquired by PE with more than €150 million, from 2005 and 2011. The research found out that the participation of PEs in the firms increased companies' long-run prospects and a growth in profitability and productivity. The results also affirm that the companies benefited of improvement in their strategic and operational outcome. The meliorations on those measures are 1,6 times higher in companies linked to a PE rather than their comparable non-linked companies.

Sometimes could happen that there could be problems in the relationship PE – target company because the PE has, of course the same firm's objectives, but within a different timing. In other words, the management and the shareholders of the firm want to see realized their goals both in the short and in the long – term horizon. It is a slightly different story for the managers of PEs that want to achieve their aims (objectives/purposes) in the short/medium – term horizon, because a PE takes part of the company for a maximum of 10 years, hence it does not take too much care of the company trend in the next 20-30 years. This could flow into a conflict of interests between PE's and firm's management.

As can be observed from the studies above, the results are on average more inclined to the PE participation in the Board of Directors of companies. But this is not always the truth because

Therefore, to act in the most optimal way, each company should take its decisions taking care about its economic and financial situation and its position in the marketplace.

4.2.1 Reflecting the Theory in the Case Study: from Equatorial Energia's point of view

The case of the Holding Equatorial Energia was different from other ones.

The practical and tangible results obtained from this company are shown below through the Income Statement, the Balance Sheet and the Cash Flow Statement of Equatorial Energia:

Income Statement Equatorial Energia 2006 - 2017

Income Statement R$ (Thousands)	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Total operating revenue	**855.596**	**878.974**	-	**1.700.634**	**1.806.962**	**1.980.528**	**2.902.676**	**4.731.883**	**6.797.259**	**7.277.656**	**7.972.701**	**9.122.158**
Net sales revenue	855.596	878.974	-	1.619.490	1.798.884	1.980.528	2.884.496	4.715.036	6.773.453	7.252.942	7.952.181	9.071.420
Cost of goods sold	(443.351)	(442.690)	-	(1.039.554)	(1.105.927)	(1.276.724)	(2.056.081)	(3.672.894)	(5.071.896)	(5.449.010)	(5.803.400)	(6.446.385)
Gross profit	**412.245**	**436.284**	-	**579.936**	**692.957**	**703.804**	**828.415**	**1.042.142**	**1.701.557**	**1.803.932**	**2.148.781**	**2.625.035**
Selling and distribution expenses	(81.372)	(66.447)	-	(70.679)	(84.929)	(110.472)	(146.980)	(336.072)	(371.449)	(428.616)	(560.600)	(583.261)
Administrative expenses	(50.483)	(57.540)	-	26.760	(353)	7.891	(69.670)	(83.714)	8.619	(59.244)	14.900	(189.528)
Depreciation, amortization and impairment charges	3.423	-	-	(97.593)	(98.494)	(108.359)	(105.188)	(250.792)	(294.271)	(313.676)	(343.499)	(380.732)
Net other operating result	-	-	-	9.678	(100.866)	(135.433)	(103.525)	(82.999)	(121.615)	(190.613)	(80.645)	(61.182)
Other operating income	-	-	-	81.144	8.078	-	18.180	16.847	23.806	24.714	20.520	50.738
Other operating expenses	-	-	-	(71.466)	(108.944)	(135.433)	(121.705)	(99.846)	(145.421)	(215.327)	(101.165)	(111.920)
Operating profit (EBIT)	**283.813**	**312.297**	**-**	**448.102**	**408.315**	**357.431**	**403.052**	**288.565**	**922.841**	**811.783**	**1.178.937**	**1.410.332**
Financial result	**(35.596)**	**(32.172)**	-	**(80.486)**	**(64.013)**	**(53.428)**	**(91.209)**	**(219.098)**	**(210.909)**	**309.280**	**(128.925)**	**(169.216)**
Finance income	71.093	84.898	-	110.140	99.767	111.037	259.845	473.381	627.621	1.272.426	862.887	571.945
Interest income	71.093	84.898	-	110.140	99.767	111.037	259.845	473.381	627.621	1.272.426	862.887	571.945
Finance costs	(106.689)	(117.070)	-	(190.626)	(163.780)	(164.465)	(351.054)	(692.479)	(838.530)	(963.146)	(991.812)	(741.161)
Interest expense	(106.689)	(117.070)	-	(190.626)	(163.780)	(164.465)	(351.054)	(692.479)	(838.530)	(963.146)	(991.812)	(741.161)
Profit before income tax	**248.217**	**272.127**	**-**	**367.616**	**344.302**	**304.003**	**311.843**	**69.467**	**711.932**	**1.121.063**	**1.050.012**	**1.241.116**
Income tax	**(53.962)**	**(67.952)**	**-**	**(75.827)**	**(58.204)**	**(57.834)**	**(104.377)**	**9.050**	**68.630**	**(161.215)**	**(176.886)**	**(36.033)**
Profit after income tax	**186.842**	**202.564**	**-**	**291.789**	**286.098**	**246.169**	**207.466**	**78.517**	**780.562**	**959.848**	**873.126**	**1.205.083**
Profit (Loss) From Discontinued Operations	(61.432)	(48.120)	-	(69.189)	-	(86.173)	-	-	-	-	-	-
Net Profit (Loss) for the Period	**125.410**	**154.444**	**-**	**222.600**	**286.098**	**159.996**	**207.466**	**78.517**	**780.562**	**959.848**	**873.126**	**1.205.083**

Source: EMIS (Emerging Markets Information System)

The Income Statement[37] - also known under other names such as 'Profit & Losses Statement' or 'Earnings Statement' - is a financial statement in which it is shown the financial performance of the film for a definite interval of time. It is mandatory for traded companies and it gives an explanation of how the business gains revenues and supports expenses and in which measure, both for operating – revenues and expenses associated with company's business activities - and non-operating activities – not directly related to operations ones.

[37] https://www.investopedia.com/terms/i/incomestatement.asp

As it can be easily observed by the table, from the year of acquisition from Vinci Partners, the company increased all its values in positive:

- *Total Operating Revenue*: the total revenue is the amount of money that a company brings in for the sale of goods/services and it is a simple multiplication between the price of goods/services are sold and the number of units sold.
  When in 2006 Equatorial Energia was acquired from Vinci Partners, this amount was about R$ 855,5 million while after 9 years, in 2015, this sum grew by 750,6% reaching R$ 7.277,6 million and continued to increase after 2015 too.
- *Gross Profit*: gross profit reveals the amount of money left over when sales and cost of goods sold are subtracted from the total revenue. It represents a measure to understand company's financial health. It is usually computed (this is not the case) the *Gross Profit Margin* that measures how much income is kept in a company as compared to the total revenue.
  Also for this measure Equatorial Energia experienced a highly positive trend. In the years of ownership from the PE, the gross profit increased by 3,37 times from the beginning to the end.
- *Operating Profit (EBIT)*: deducting selling, distribution and administrative expenses, depreciation, amortization and impairment change, net other operating results from the gross profit is obtained the EBIT – Earnings Before Interest and Taxes. This figure is one of the main indicators of company's profitability and one of the most known.
  In 2006, the operating profit was just R$ 283,8 while at the end of Vinci Partners mandate its amount was
- *Financial Result*: it is the sum between Finance Income (Interest income) and Finance Costs (Interest expenses). In general, it could be the earning or the loss which directly results from financial affairs.
  In this case the financial result is negative, meaning that the costs are higher than the income. Moreover, they were always negative (except for year 2015) with an average of R$ 64,6 million per year but they increased every year.
- *Profit before Income Tax (PBT)*: it represents the EBIT summed up to the Financial Result. It is a measure that looks at the profit before the firm pays its own corporate taxes, it only considers interest expenses and operating expenses, computed at net of the revenues.
  Also this measure increased exponentially by 351,65% through all the holding period detained by Vinci Partners.
- *Profit after Income Tax*: it is simply the difference between Profit before Taxes and the corporate taxes themselves.

- *Net Profit (Loss) for the Period*: also known as *Net Income* or *Bottom Line*, it is one of the most important measures to understand the profitability of a company. Taking the total revenue, subtracting the total expenses and the taxes, it can be computed the Net Profit. This Bottom Line can be then distributed among shareholders as dividends or can be retained by the company to make investments/projects for the firm itself.

  The Net Profit was one of the most affected measures from the entrance of the PE in the company portfolio, through the years the net income improved 6,65 times.

Balance Sheet and Cash Flow Statement Equatorial Energia 2006 - 2017

Balance Sheet R$ (Thousands)	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Total assets	**1.960.427**	**2.325.075**	**4.780.486**	**3.017.540**	**3.276.531**	**3.398.831**	**9.280.447**	**9.103.499**	**11.268.636**	**12.585.887**	**14.219.520**	**17.488.452**
Non-current assets	1.299.478	1.499.678	3.272.642	2.151.271	2.177.996	2.345.214	5.961.063	6.022.300	6.881.812	7.427.536	8.291.988	9.994.252
Current assets	660.949	825.397	1.507.844	866.269	1.098.535	1.053.617	3.319.384	3.081.199	4.386.824	5.158.351	5.927.532	7.494.200
Total equity and liabilities	**1.960.427**	**2.325.075**	**4.780.486**	**3.017.540**	**3.276.531**	**3.398.831**	**9.280.447**	**9.103.499**	**11.268.636**	**12.585.887**	**14.219.520**	**17.488.452**
Total equity	881.960	904.544	1.699.338	1.158.849	1.270.917	1.258.543	2.515.592	2.847.647	3.445.525	4.229.239	4.871.687	5.748.104
Total liabilities	1.078.467	1.420.531	3.081.148	1.858.691	2.005.614	2.140.288	6.764.855	6.255.852	7.823.111	8.356.648	9.347.833	11.740.348

Cash Flow Statement R$ (Thousands)	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Net cash flow from (used in) operating activities			**0,00**	**664.442**	**257.404**	**352.643**	**(231.960)**	**(42.626)**	**(374.076)**	**1.197.712**	**867.699**	**1.057.111**
Net cash flow from (used in) investing activities			**0,00**	**(486.476)**	**(201.283)**	**(278.634)**	**(1.513.550)**	**219.902**	**(656.201)**	**(963.587)**	**(944.426)**	**628.673**
Net cash flow from (used in) financing activities			**0,00**	**(144.644)**	**53.449**	**(175.686)**	**1.641.101**	**40.508**	**959.490**	**(116.357)**	**599.645**	**1.565.906**
Net increase (decrease) in cash and cash equivalents			**0,00**	**33.322**	**109.570**	**(101.677)**	**(104.409)**	**217.784**	**(70.787)**	**117.768**	**522.918**	**3.251.690**
Cash at the beginning of the period			**0,00**	**614.655**	**440.507**	**550.077**	**237.510**	**133.101**	**350.885**	**280.098**	**397.866**	**920.784**
Cash at the end of the period			**0,00**	**647.977**	**550.077**	**448.400**	**133.101**	**350.885**	**280.098**	**397.866**	**920.784**	**4.172.474**

Source: EMIS (Emerging Markets Information System)

The Balance Sheet[38] portrays company's assets and liabilities and equity's shareholder at a given point in time. It also gives a basis for computing rates of return and valuating the company's capital structure. The Balance Sheet is universally represented by the following equation:

ASSETS = LIABILITIES + SHAREHOLDER'S EQUITY

Where the Assets are all the resources of a company, that can be tangibles or intangibles, and are combined and used to produce the final good/service of the firm; the Liabilities are all the money that the company owes to its stakeholders that can be creditors, suppliers, or whoever has a credit with the company. The Liabilities can be Current – if are closed within one year and are listed – or Long-term ones – closed whenever after one year; Shareholder's Equity is the money of the business' owners, which basically are the shareholders.

[38] https://www.investopedia.com/terms/b/balancesheet.asp

Understanding the Balance Sheet is extremely intuitive: given that the company needs things (assets) to obtain its final product, it needs to pay for them and it does it through borrowing money (taking on liabilities) or procuring it from investors on the market (issuing shareholder's equity).

The Total Assets increased 6,5 times from 2006 to 2015, from R$ 1,9 to R$ 12,5 million. The total Liabilities were higher than Shareholder's Equity meaning that the company was issuing debt to finance its operations, therefore the firm has a positive Debt-Equity ratio.

The Cash Flow Statement[39] is maybe the most important figure between these 3 listed. The Cash Flow (CF) alone is the movement of cash into or out of an account, a business or an investment, so the Cash Flow Statement represents a spreadsheet in which are listed different kind of CFs.

- *Cash Flow from Operations*: it is cash received or spent as a result of the transactions made by company's normal business activities. It helps to understand if the company is able to generate by itself sufficient positive cash flow or it needs to be financed by external parties.
  The CF from Operations followed a strange path over the years, it started from R$ 0,64 million in 2009 and then decreased for 5 years, when in 2015 they sensibly increased by 420%. After the exit by Vinci Partners in 2015, these CF stabilized around R$ 1 million. This means that there was not stability in the results of the operating activities during the PE's ownership, but after that the things were better.
- *Cash Flow from Investing*: it is cash received or spent through investing activities, for example the cash spent for properties, plants, equipment. The Cash Flow from Investing also includes the CAPEX (Capital Expenditures), the funds used to purchase physical assets for a determined aim such as a project.
  The CFs were almost negative for each year of consideration, meaning that the company was investing. In 2012 the CFs from Investing activities were extremely negative, - R$ 1,5 million, this explaines the acquisition of CELPA that was invested in.
- *Cash Flow from Financing*: it is cash received through debt or paid out as debt repayments.
  CFs from Financing Activities are positive or negative differently year by year, depending what were the intention of the company. For example, in 2011 the CFs were negative given the acquisition as majoritarian shareholder of Sol Energias (51% of shares); the following year it was notably positive given the acquisition of the company CELPA and the Follow-on to increase its capital.

[39] https://www.investopedia.com/terms/c/cashflowstatement.asp
The CF Statement begins to show its values only from 2009 on because the data-base utilized (EMIS) to get those information does not have any value before that year.

- *Net increase (decrease) in cash and cash equivalents:* it is normally called *Net change in cash* and defines the differential in cash and cash equivalents given the company's operating, investing and financing activities.
- The last two lines of the Cash Flow statement underlines the *Cash at the beginning of the period* and the *Cash at the end of the period*, which are very intuitive measures of cash in different points in time, to comprehend the "delta".

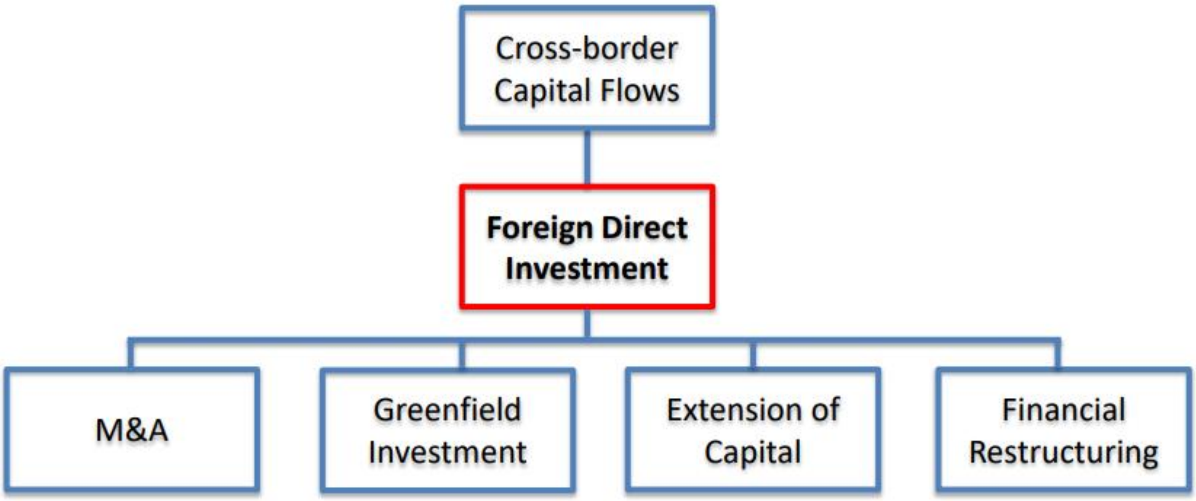
  This difference in cash was negative almost every year from 2009 on, exceptionally for 2011, 2012 and 2014 in which the amount of cash circulated in the company.

5. PEs and Emerging Markets

5.1 Influence of a PE on a Company

In lots of emerging markets there is a superficial knowledge of PE investments and there is not a deep understanding on which are the advantages these asset classes bring to the economies. It is verified and confirmed that emerging countries have higher volatility and risk, for that reason could not be the first choice of investment for a foreign private equity. Many foreign investors see as a threat putting their funds in the hands of a such unstable and unpredictable market.

On the other side, other countries are open to the so-called FDI (Foreign Direct Investments) flows, considering them a robust source of finance in the long-run horizon. An FDI is a kind of investment in which the direct investor buys part or the entire business of a company (usually the part that receives the funds is a company) and the main feature is that the two parts are based in different places in the world. As previously underlined, the main objective of implementing an FDI is to build up a long-term relationship with the foreign enterprise, to reach a significant level of influence on the management of the firm itself in order to improve the decision path.



Source: International Trade and Commercial Policies' LUISS course

An FDI could be Horizontal or Vertical[40]. It is of the first type when the direct investor wants to expand its operations into another market and get profit from another country simply replicating the same activities in another country; while, it is a vertical FDI when a direct investor decides to acquire an operation that could require a position as a supplier – in this case it is called "backward

[40]LUISS' course by Professor Manzocchi: http://docenti.luiss.it/manzocchi/files/2008/07/International-Trade-and-Commercial-Policies-Brazil-2.pdf

vertical FDI" – or the position of distributor – called "forward vertical FDI". In few words, in a vertical FDI the investor locates different stage of production in separated countries.

As the above picture suggests, an FDI could be implemented in several ways:

- *M&A*: when an indirect investor acquires or merges a foreign company;
- *Greenfield Investment*: as opposing to *Brownfield Investment*, in which the investment is made in a foreign company placed in already existing buildings, while in a greenfield investment the direct investor decides to build up its new plants rather than purchase or lease one;
- *Expansion of Capital*: it is characterized by the improvement of capital of the direct investor which decides to buy a firm in another country;
- *Financial Restructuring*: it happens when the direct investor wants to help a foreign company in distressed situation investing in it. This is the case when Equatorial Energia bought CEMAR or also CELPA, to restore them, with the only difference that Equatorial Energia is in the same country of CEMAR/CELPA, but the basic idea is the same.

There is a strong connection between FDI and PE because both tend to orient their investment strategies in the medium-term and both have the aim to transform an underperforming company into a profitable and growing business. Once that the target enterprise become such a successful one, it is also seen from a different and a better perspective by other investor, the strategic investors. Hence, PEs act as a connection between portfolio investors and strategic investors.

The benefits of PE for a company in an emerging market:

During the last years in which PE investments developed and expanded all over the world, there has been great evidence affirming that these investors brought high benefits to developed countries. In particular, Europe encouraged these ways of financing since they were seen as a source of employment, financial progress and technological improvement. On the other side, emerging economies has been more sceptical, above all in the first years the PEs were born, adopting those sources of financing "treading" very carefully.

Overpassing the fear of the emerging countries, there are more benefits that a PE could bring to the economy:

- <u>PEs support entrepreneurship improvement</u>:

"In times when it becomes more and more complicated to get bank loans, private equity turns out to be the essential if not even saving alternative. Many companies would not have been founded or reorganized or have found successors if it had not been for private equity"[41]

It is well known that in emerging countries it is harder to access to financial resources given the less development capital market. For that reason, the public authorities that need to incentive the growth of the whole State, therefore are interested in attracting resources which promote financing and entrepreneurial capacity.

From one side it is absolutely true that the participation of a PE into the management of a target company decreases the control of the latter in the final decisions; but, on the other hand, it could happen that it is the only possible way. When a firm is underperforming from years or it is in distressed situation, it seeks to attract PE investors to find a balance again and perform well in the future.

Moreover, PEs allocate large amount of money in the target company, for that motivation they have a great influence on the invested company. This influence could be a useful tool for solidly supporting the entrepreneurship and the sector it is working in. The PE can help illustrating different and new techniques that can be used to change in positive the health of the company, or the PE can make pressure to the government encouraging it to undertake some reforms that could be very useful for the business environment itself. Acting in this way, the target firm could become a highly competitive company among the market just thanks to the acquisition from the PE;

- <u>PEs help companies to grow:</u>

  When a PE chooses which firm to invest in, it considers the growth prospect the company has, and in which measure it is expecting to grow. These can be start-up, just-born companies or firms already in operation, which could have financial problems or inadequate management. The target companies for a PE can also be the ones that are looking for launching a new product on the market or entering in a new sector or making acquisitions

  An important decision that a PE must take is the percentage of share to undertake, normally PEs buy enough shares to take control of the company and influence its management.

  The high motivation of PEs to add value to the company make them good partners for the target firm, since they share the same interests. This is one of the most important characteristics that distinguish a PE from a common portfolio investor, the latter is more

[41] "German Companies Widely Benefit from Private Equity" in German Private Equity and Venture Capital Association e.V. (BVK) and PricewaterhouseCoopers common study on The Economic Impact of Private Equity Firms on Portfolio Companies and the German Economy

interested in Dividends and so its primary objective is not the growth of the company but just the positive income, but this is not enough for a common PE. PEs try to avoid inefficiencies, maximise shareholders wealth, expand the business of the company, and much more.

As already affirmed in this written, the first purpose of a PE investing in a company is to make profit as much as possible. In the attempt of achieving this result, the PE tries to implement value creating opportunities, which are based on improving financial results of the target firms. The managers of a PE provide both financial and non-financial inputs, in the attempt to allocate higher efficiency and profitability to the company. This non-financial input could be different from each firm, depending on its level of "growth": strategic advices, networking, supporting in financing (with banks too), looking for professionals, improve organizational skills, intensify corporate governance, admission to market information.

- PEs increase target firm's competitivity:

  In the passage from company to PE's management, the competitivity of the invested firm increases both at the national and international scene. This is explained by the strategy of expanding the business to external markets which give strength to the target company both at domestic and foreign levels.

  When a firm is well known it is also easier to be sold at a higher price to the best bidder on the market, when the PE decides to exit the investment.

- PEs improve social role:

  The higher reputation developed by the private equity-backed companies is also reflected in social benefits such as an improvement in human capital, higher social contribution and job creation.

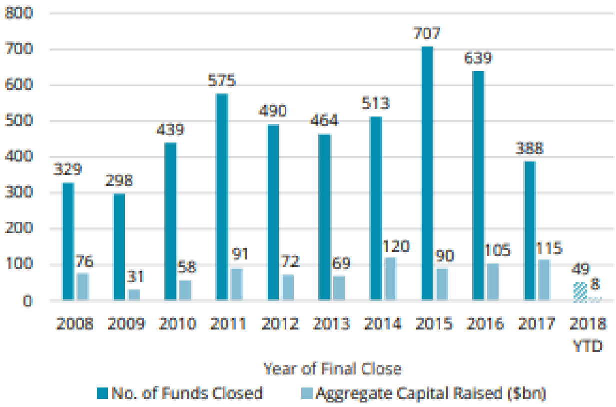
  Besides, companies owned by PEs have the most qualified employees. Statistics affirm that the employees in PE-backed companies are dedicating their time also to training, while it is not always true for non-PE-owned firms.

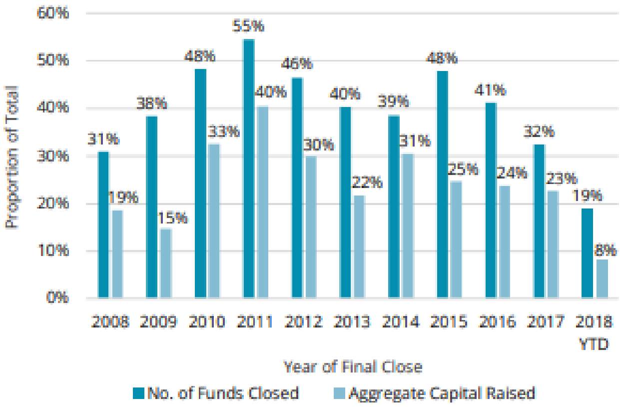
5.2 Emerging Markets' Financial Statistics

In 2017 Private Equities registered the higher fundraising level, the largest fund ever was closed, and highest entry price in assets. In sum, 2017 was an extremely positive year for private equities.

What about Emerging Markets?

Researches made by Prequin[42] regarding emerging markets show that 2014 was in absolute terms the most profitable year with respect to the 513 funds that reached a final raising of US$ 120 billion, followed by the last year in which 388 funds reached US$ 115 billion; while in terms of number of fund closed the most efficient year was 2015 with 707 funds, followed by 2016 in which 639 funds were closed.



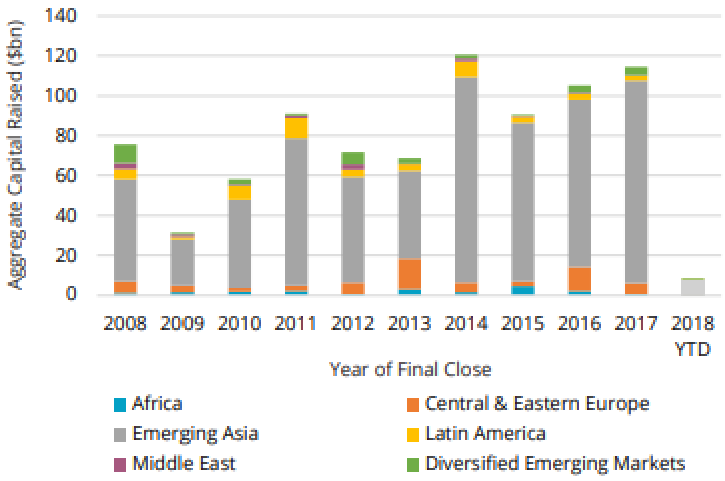


Source: Preqin

The figure above on the right shows the emerging markets-focused fundraising as proportion of all PEs, on a length of time of 10 years, from 2008 until 2018. Even though in the successive years the financial crisis the emerging markets-fundraising were highly popular given the necessity of investors to diversify their portfolio, from 2014 on the same investors decided to focus their attention to more stabile markets, in lower risk developed countries, which saw their exit from the crisis and had stronger returns.

The following column graph shows instead the capital raised in emerging markets by PEs from 2008 until 2018:

[42] Prequin is an Alternative Asset Data and Intelligence Database. The research was implemented in the following paper: http://docs.preqin.com/reports/Preqin-Special-Report-Private-Equity-in-Emerging-Markets-May-2018.pdf



Source: Preqin

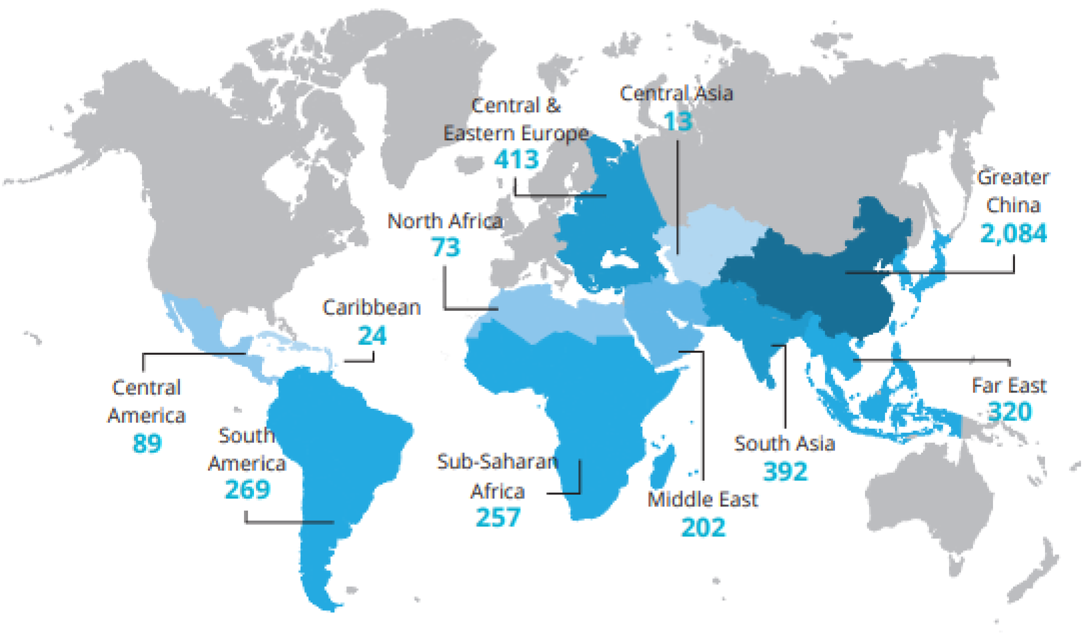
It is easily observable that Asia is first in the podium, with a huge difference to the other emerging countries. From 2008, 8 on 10 dollars were invested in emerging Asia rather than in other markets; the reserved capital invested in Asia increased from 74% in 2009-2013 to 86% from 2014-2018.

After Asia there is Latin America, that was able to reach an aggregate capital of US$ 47 billion from 2008-2018, even though from 2014 until today the capital invested decreased sensibly.

The number of PE fund managers located in Emerging markets are positioned as the following map shows. The highest number of PE funds are placed in China with 2.084 funds, followed by Central & Eastern Europe with only one-fifth funds respect to the advanced China. All the other regions have more or less the same amount, with small differences of 100 units, after Europe there is South Asia, Far East and finally South America. Caribbean is the last in the classification with only 24 PE fund managers, given its small geography.

China is helped by its high density of population, by the dedication of Chinese people to work hard and other important characteristics that let it to become the first world's fastest-growing major economy, even though it is still an emerging market. China is the largest emerging economy in terms of total capital raised by PE fund managers in the last 10 years, with an amount of US$ 22,6 billion invested from the firm SINO-IC Capital, US$ 20,2 billion from China Reform Fund Management, US$ 19,6 billion from CCT Fund Management and US$ 17,4 billion invested from China Aerospace Investment Holdings, with a total amount of raised capital of US$ 79,8 billion from 2008-2018.

Brazil does not represent the whole South America, but it is a great part which highly contributes to let South America in the average of the emerging countries with its 269 PE funds investing in it.



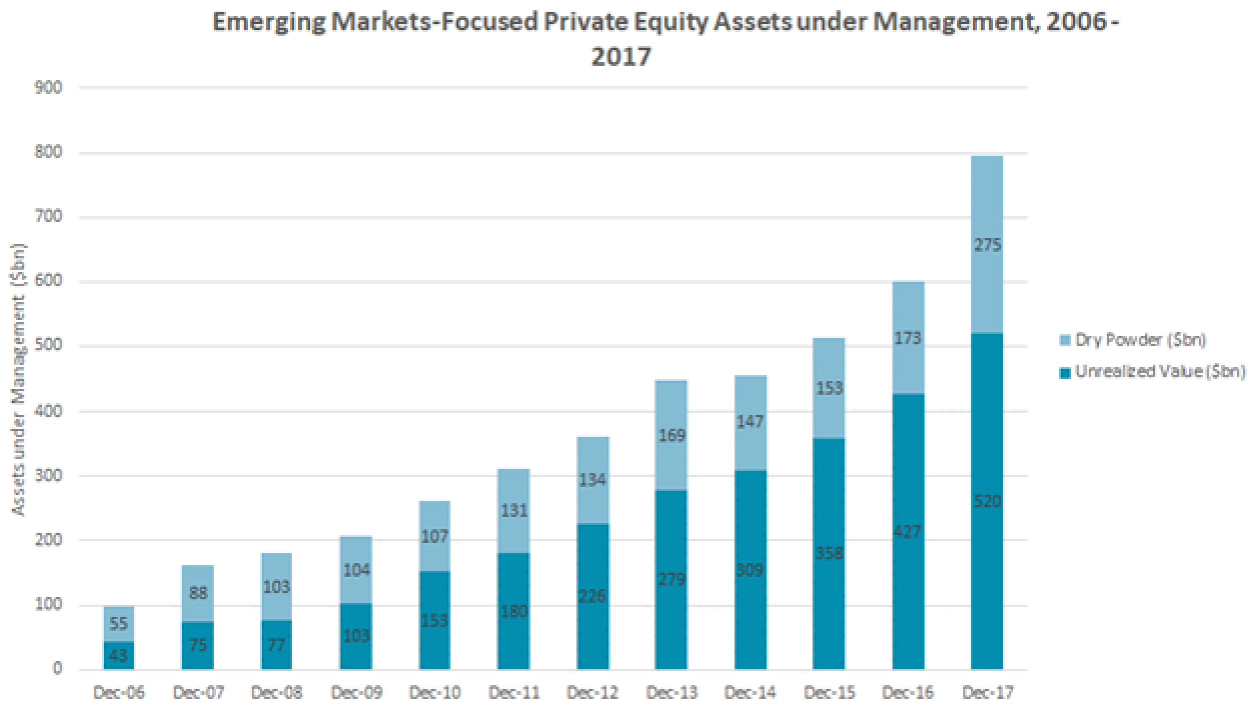
Source: Preqin

Emerging markets host in total 1134 PEs worldwide, it is just 16% of the entire amount: Greater China detains 357 investors in its market representing 31,48%, while in South America there are 140 participants, 12,35% of institutions which are actively investing in their asset classes.

It is demonstrated through empirical researches that the type of investor changes differently from developed to emerging markets. For example, foundations, public pension funds and private sector pension funds are more popular in developed countries while sovereign wealth funds or government agencies are less; on the other side, in emerging markets are more demanding for corporate investors, banks or investment banks and investment companies.

Preqin made interviews to 250 PE emerging market-investors at the end of 2017 to catch their intentions in the long-run. From the results is possible to highlight that 64% of investors in emerging markets want to decrease their asset allocation in these countries, while 30% is determined in increase its own allocation and just 6% wishes to decrease it. In particular, from those investors' perspective, their best opportunities of investing are located in China (51%), Emerging Asia (40%), India (24%) and Latin America (17%), with a contribution of 11% for the Brazilian economy.

The Asset Under Management (AUM) – the total market value that a company manages – improved by 33% again from 2016 to 2017 as it is shown from the following picture which represents AUM from 2006 to 2018. With a light blue it is showed the *Dry Powder*, meaning the liquid marketable securities, considered a good point for the business, while the *Unrealized Value* is a profit that only exists on paper, as a result of an investment. The graph shows the constant increase year by year of the AUM, in particular with a big positive jump from 2016 to 2017.



Source: Preqin

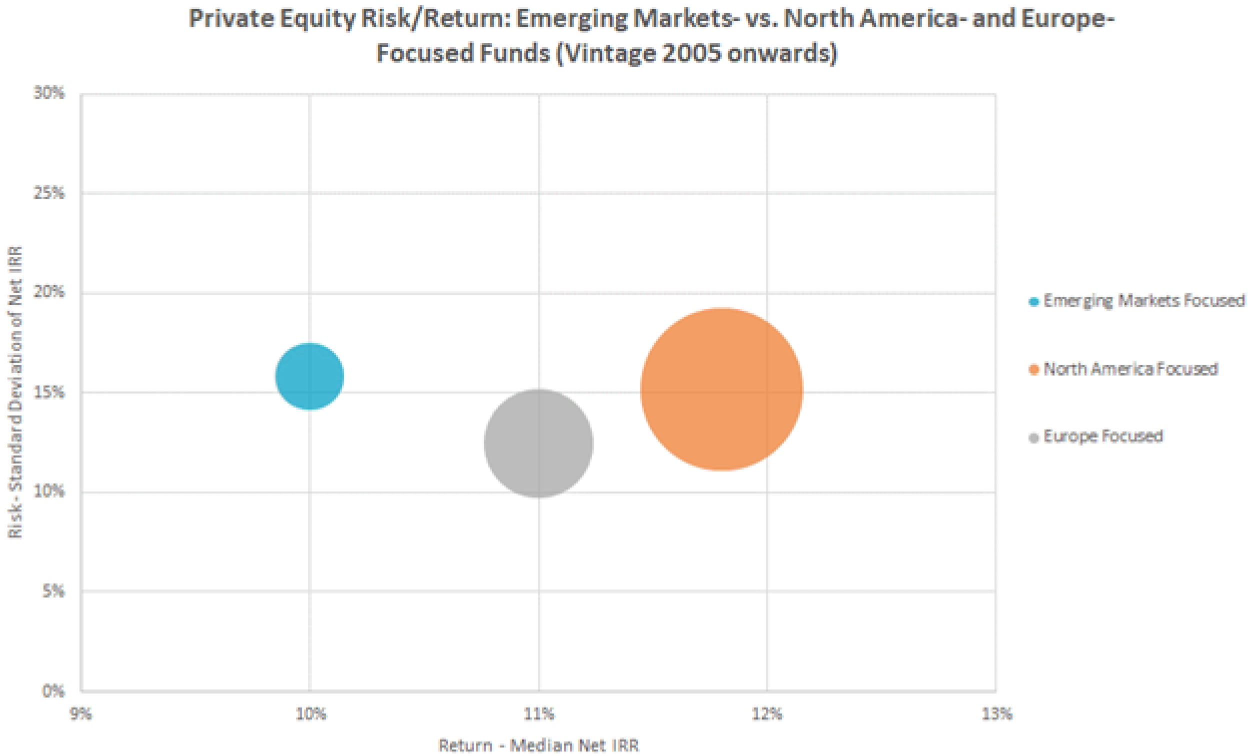
The years 2006-2015 registered an Internal Rate of Return (IRR) on average above 8%.

The IRR is strictly correlated with the Standard Deviation, meaning the risk of the investment, since they are directly proportionated measures – when one increases, also the other increases. The next figure presents these 2 features in relation to 3 different focus places by investors: Emerging markets, North America and Europe.

The results observed are clearly different:

- North-America's ball is the biggest since has the highest value of funds (US$ 1.202.500 million), it has an IRR of 12% and a Standard Deviation (risk) 15%;
- Europe's circle contains less value in funds (US$ 550.671 million), IRR 11% and risk 12%;
- In the emerging markets the sum of fund value is equal to US$ 210.834 million and its IRR is 10% while the risk is the highest, 16%.

Following the theory rules ideated by Markowitz it should be applied the *Mean-Variance Rule*. This rule states that to get an efficient portfolio, the investor should invest its funds in the choice with higher Expected Return and the smallest Standard Deviation. In this case the best choice would not be easy to catch because it is ambiguous. To obtain an efficient portfolio allocation it should be considered the degree of Risk Aversion of the investor itself, which is a personal feature.



Source: Preqin

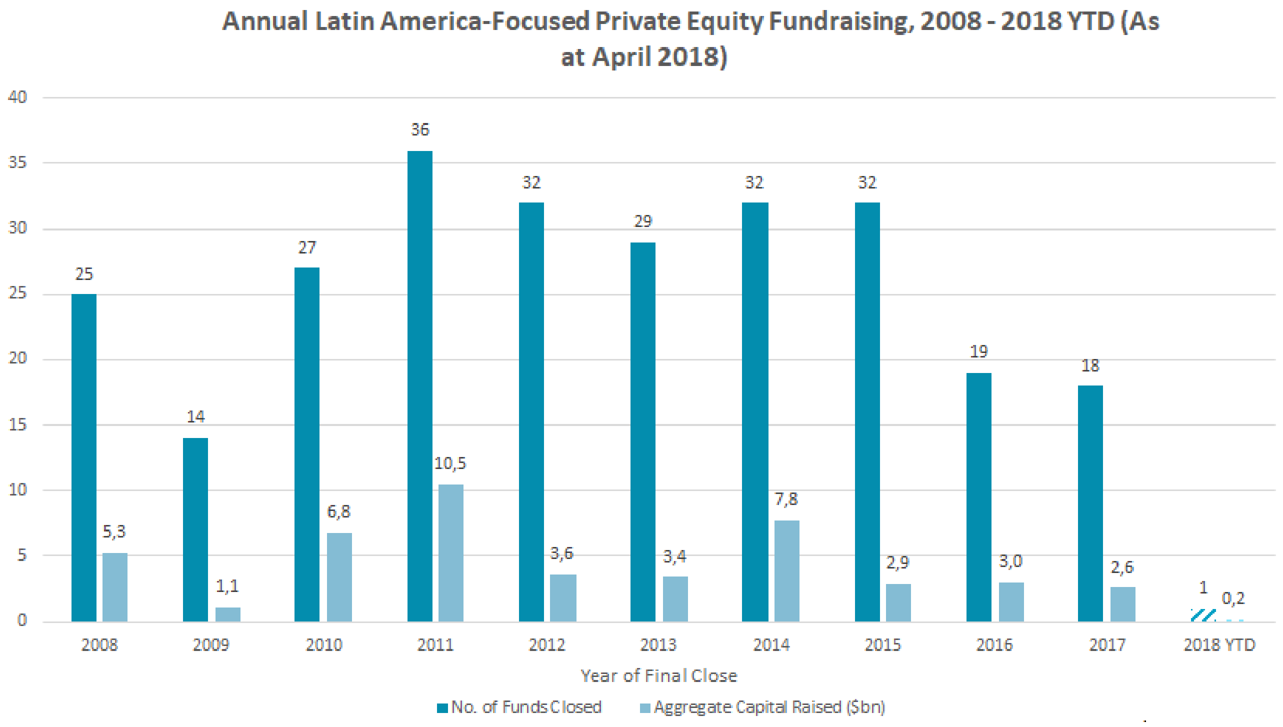
“*Despite talk of an over-crowded market and high valuations, emerging markets-focused private equity is on the rise. We’ve seen emerging markets-focused funds of newer vintages show progressively higher returns, matching and even exceeding North America- and Europe-focused private equity vehicles. In addition to strong performance, we have seen capital distributions outstrip capital calls in the first three quarters of 2017 for emerging markets-focused funds, returning more net capital than ever before to investors*” those the sincere positive words of Christopher Elvin, Head of PE Products at Preqin.

5.3 Focus on Latin America

Latin America has never been a stable market, it is composed of several States all different from each other: Brazil is the biggest with the highest density of population concentrated in the South, while the North is poorer and has less job opportunities; Venezuela is the State with more oil resources in the whole world but it is not able to exploit and to manage it, that is why in the last years Venezuela is going through a deteriorating crisis; Colombia is the second largest economy in Middle-America in terms of GDP and has strong business relationships with United States; until the beginning of this year, Argentina's economy seemed was going well, but from April 2018 there has been a deep currency crisis. Peso started to decline on April arriving to the lowest level ever and inflation climbed.

Those listed are just few of the many States in South America, each one with its advantages and drawbacks, each one with its own features and problems.

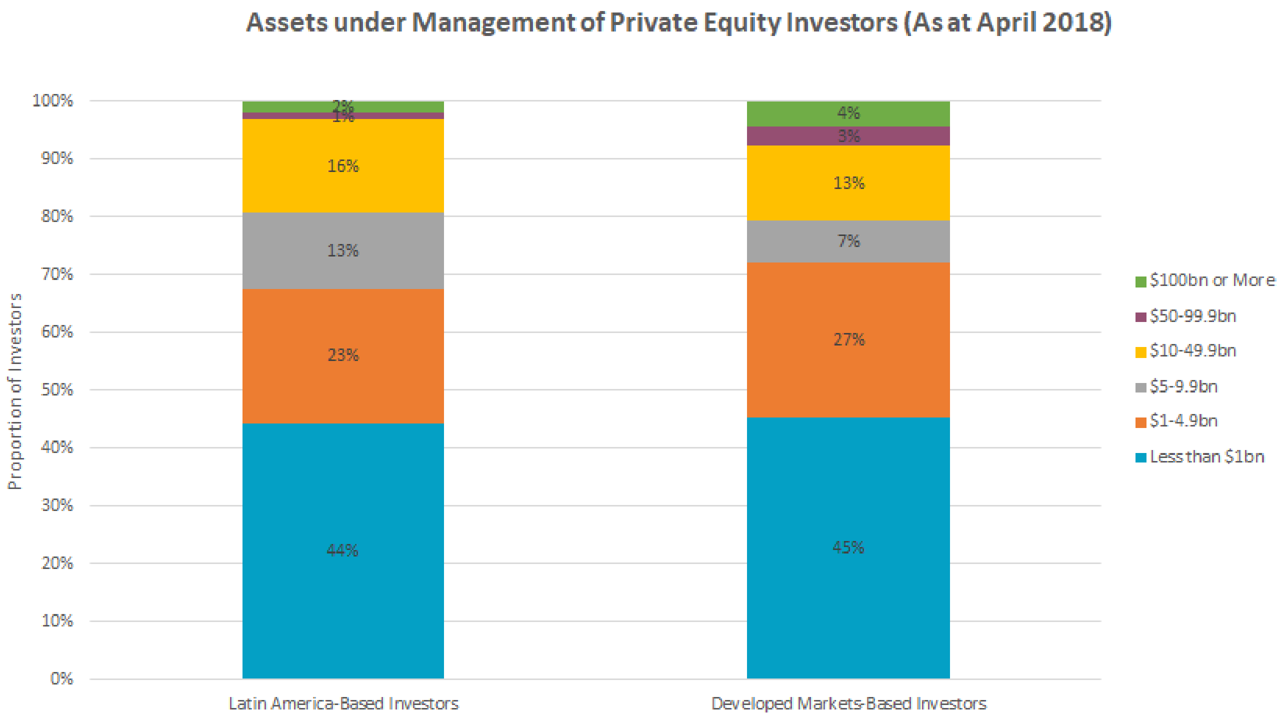
In general, coming back to PEs' world, the situation respect to aggregate capital raised (US$ billion) and number of funds closed in Latin America is represented by the following graph:



Source: Preqin

The most profitable years for investors and PEs were from 2011 and 2015, that saw the highest number of Funds closed that were on average 32, while the aggregate capital saw a boom in 2011 with US$ 10,5 billion raised by the funds, and a second abnormal capital increase in 2014 with US$ 7,8 billion.

The AUM of PE investors in Latin America in terms of billion invested is higher in Developed countries by 2 percentage points for transactions of US$ 100 billion or more and for deals of US$ 50-99,9 billion, meaning that the heaviest investments are made in richest countries. But other deals of US$ 10-49,9 billion and US$ 5-9,9 are larger in Latin America rather than in other Developed markets, by 3 and 6 percentage points, respectively. Transactions of US$ 1-4,9 billion are higher in Developed place such as deals of smaller size of less than US$ 1 billion, even though for a small difference. The amounts of AUM in Developed and Latin America markets are reported here:

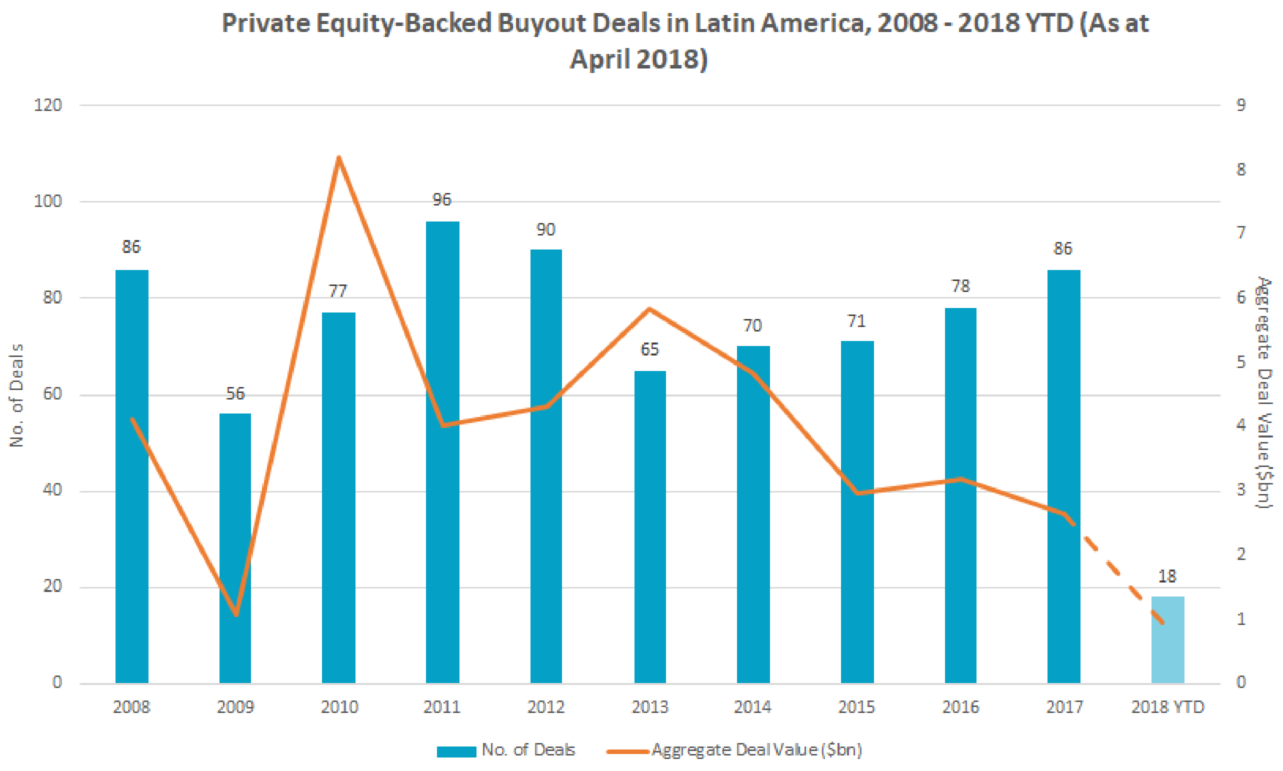


Source: Preqin

It is true that the largest AUM is invested in Developed countries, but Latin America is defending in a proper manner its market in smaller amounts of AUM.

The next figure represents the amount and the size of deals of PEs in Latin America in the last decade. 2011 seems to be the most profitable year in number of deals (96) and 2010 in aggregate transaction value (US$ 8,2 billion).

After the drop of 27% in number of transactions from 2012 to 2013, from 2013 on the total number of deals in Latin America increased by 7,3% on average until 2017 while the transaction values decreased by 16,3%.



Source: Preqin

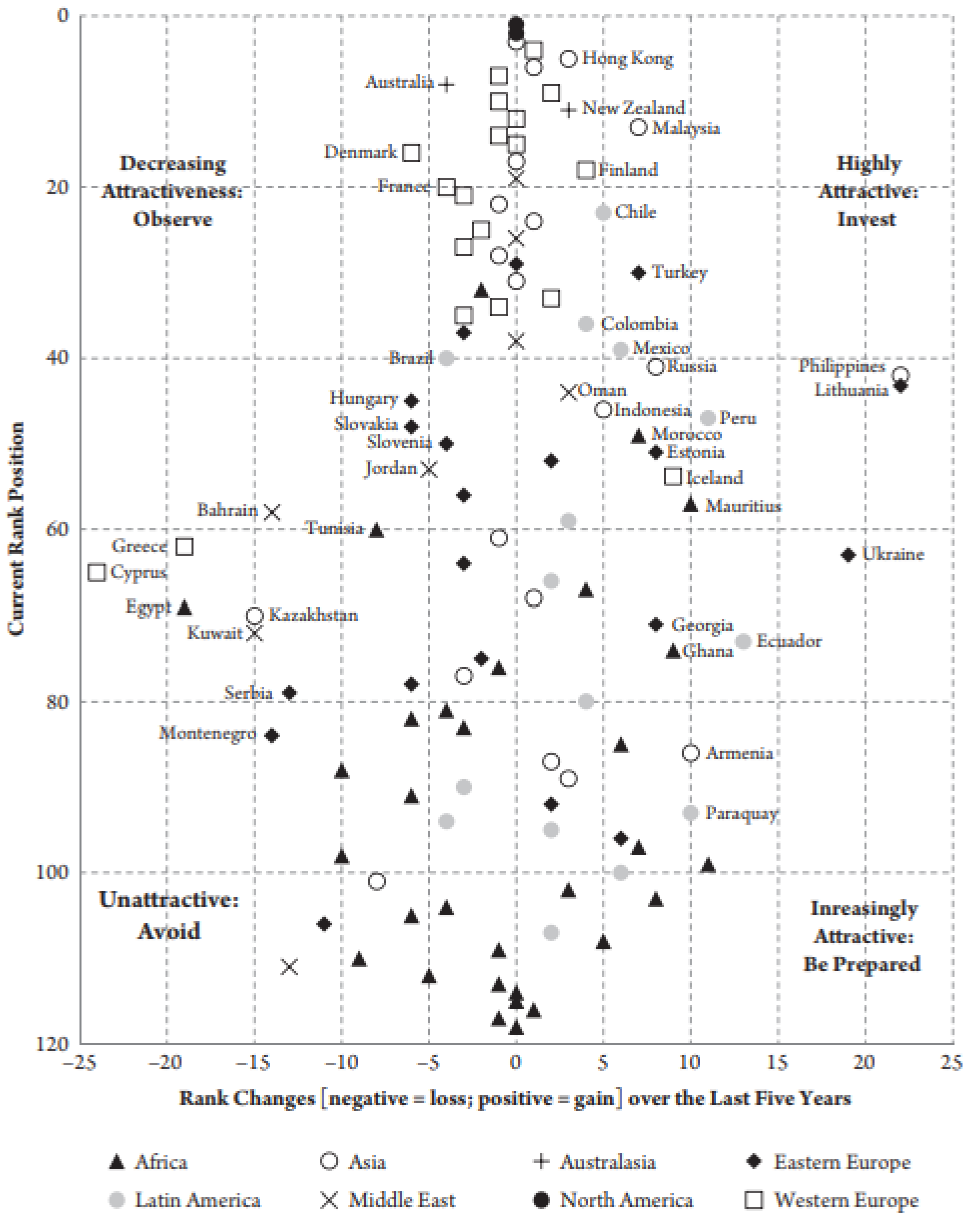
The following picture instead represents the improvement or deterioration in PE attractiveness in 118 countries between 2009 and 2014. The horizontal axis shows the changes in degree of attractiveness while the vertical axis the current degree for each country. The graph made by cartesian axes also groups countries into different sections of attractiveness from investors' point of view. Looking at the graph from the upper part on the right, there are the "highly attractive" countries which are suggested to invest in, while in the lowest part on the left there are "unattractive" investments that does not support deal activity and should be avoided.

For example, Brazil decreased its attractiveness by -4 points and now it ranks 40; Colombia improved by 4 and its actual level is 36; Perú increased its attractiveness by 11 points and its current degree is 48; Ecuador increased by 13 and now it ranks 74.

The countries in the upper-right part of the graph seem to be strong and mature enough to support PEs business model and to ensure deal flow, they also have increased their attractiveness during the observation period (2009-2014). Both emerging and developed countries that investors are interested in are Hong Kong, New Zealand, Malaysia, Finland, Chile, Turkey, Colombia, Mexico, Russia, Philippines, Lithuania. Although the countries in the lowest part on the right have increased their attractiveness in recent years, this improvement is not enough to support PE deal-making. This is the meaning of that "Be Prepared" because those countries could be an appetible opportunity of investing in the next years, therefore the suggestion is to pay attention and give some time to them.

Countries in the lowest part on the left are going degenerating over years, so it would be better to avoid them from the investment sphere.

In the last section, the upper-left part, the countries are decreasing their attractiveness during 2009-2014, but maybe they could have a last possibility to born again and increase their appeal to investors, therefore those countries should be monitored in the next years.



Source: The Venture Capital and Private Equity Country Attractiveness Index

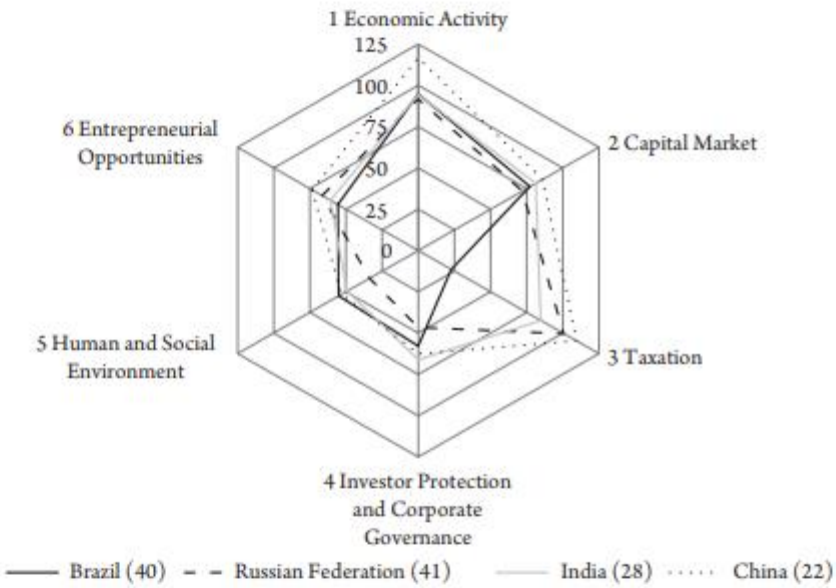
5.4 BRICS

BRICS is the acronym of Brazil, Russia, India, China and South Africa, it has been coined in 2001 from Jim O'Neill in his publication "Building Better Global Economic BRICS".

As noted previously, BRICS has become very important for investors' eyes from 2000 on.

In particular, China is one of the most attractive countries in terms of PE activity, followed by India.

The radar chart below shows 5 key drivers of PE attractiveness of Brazil, Russia, India, China: Economic Activity, Capital Market, Taxation, Investor Protection and Corporate Governance, Human and Social Environment.



Source: The Venture Capital and Private Equity Country Attractiveness Index

From the figure is possible to catch how those 5 forces are acting differently in each country: Economic Activity, Capital Market and Taxation are highly considered measures from investors rather than Investor Protection and Corporate Governance, Human and Social Environment and Entrepreneurial Opportunities. In almost all the countries involved in the research, those last 3 set of features are not very developed, while the first three are more defined and cultivated.

Since it is very hard to discern which are specifically the problems each country is affected by, the next figure shows the same macro classes in a disaggregate level:

The results reveal that the greater difficulties lie on:

- (4) Investor Protection and Corporate Governance: in particular, the Quality of Corporate Governance that not surprisingly is lower in China and Russia and more developed in India;

Security of Property Rights, where the first place is ensured to China, followed by Brazil; regarding the Quality of Legal Enforcement all the countries considered are more or less on the same level, which is relatively low;

- (5) Human and Social Environment: Education and Human Capital is higher in India and China but has very low levels in Brazil and Russia; Labor Regulations are extremely poor in Russia and India, while in Brazil there are safer laws for workers; Bribing and Corruption has higher levels in Brazil on the other countries;
- (6) Entrepreneurial Opportunities: Innovation is not stimulated in Brazil, Russia and India where this level is kept very low, while employees in China seem to be more motivated to innovate.

Source: The Venture Capital and Private Equity Country Attractiveness Index

From those statistics it is possible to understand that the problem in Emerging Economies does not lie on their real economy, on their GDP or on their growth but the obstacles to the improvement lie on the socioeconomic and political challenges. Those are very sensible points for emerging countries and it is known that are not easy issues that could be solved in few days of months but are complicated and intricated affairs that should be unlocked from their own Governments in the long-run.

5.5 Brazil

"In the old days a Brazilian business owner would be ridiculed if he actively sought outside investors. Now it's the opposite, and is regarded as a sign of great prestige and status. Once we had a private equity partner, our credibility was enhanced enormously with clients and banks. They took us more seriously."

– Founder and CEO of a São Paulo' software company

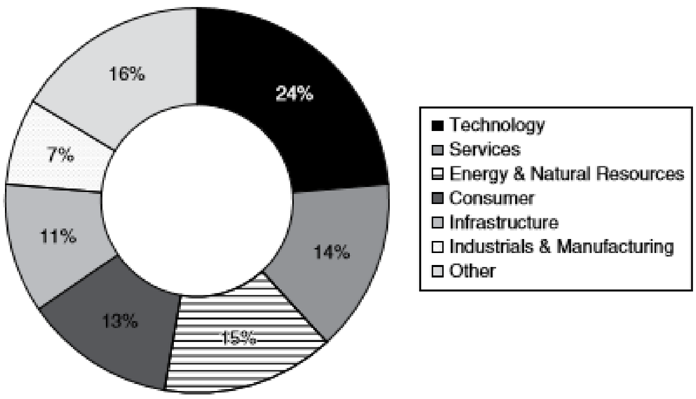
Roger Leeds, Professor at the Johns Hopkins School of Advanced International Studies and founding Chairman of the Emerging Markets Private Equity Association (EMPEA), entitled one of the chapters of his book as "Brazil: The Country of the Future". He is right.

Geographically immense, full of natural sources, crowded of people with cheerful behavior, Brazil is one of the most important and developed economies in Latin America.

Despite all those positive features, Brazil's history has complex shadows. For years its story has been characterized by endless boom and bust periods, uncontrolled inflation, weak economic growth and strong economic growth, political corruption, high income, low labor productivity, and so on.

PE investments drive into every sector of the Brazilian economy: For more than 20 years, Brazil was ranked as one of the top emerging countries for fundraising and investment activity. This country is clearly helped by its geographic and demographic size, which are significant drivers for a thriving PE activity in the Brazilian market itself, fortunately this characteristic will always be a strength point for Brazil. Moreover, Brazil has a huge proliferation in the private sector, which gives high possibilities and challenges to PE investors since they can choose among thousands and thousands of mid-size companies. From clothes to healthcare to music to entertainment to financial services to food to infrastructure, a PE investor is able to choose what he/she more prefers to invest in.

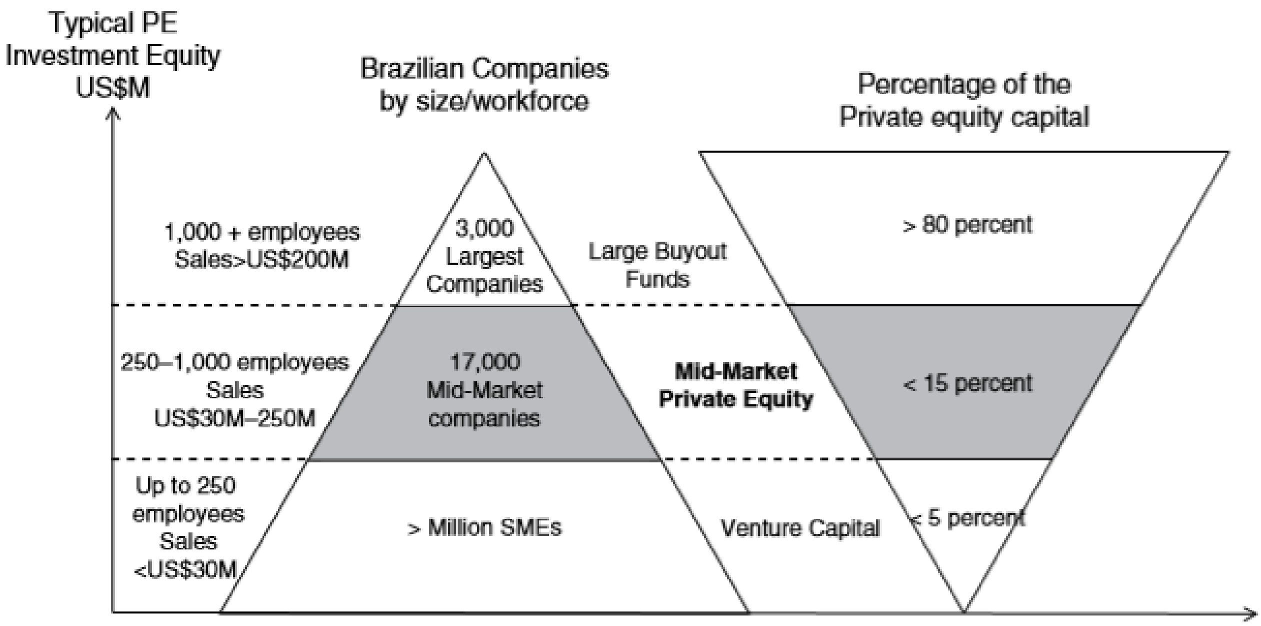
To show how much the Brazilian market is diversified in every sector of the economy, it is sufficient to watch at the picture below:



Source: EMPEA

The circular graph figures out the PEs investments made in Brazil in 2013 for each sector. The most popular sector is Technology while the less one is Industrials and Manufacturing, but on average every sector is overlooked by fund managers in Brazil. The investors focused their ambitions on the fact that an urban middle class was rising and expanding, generating deal flows in the markets. Although the high instability in the Brazilian market in the late ‘900 and the beginning of 2000, the GDP per capita increased from US$ 6.500 to US$ 12.600, meaning that the middle-class population was amplifying, was becoming richer and income inequalities were slowly decreasing. Hence, General Partners saw their Brazilian opportunities increasing, given the huge investment range.

Middle-Market Companies: in 2013, the number of mid-market firms by size was 17.000 with employees between 250 and 1.000 and with revenues equal to US$ 30 – 250 million. Those companies have the same characteristics of any other mid-market firm in other emerging market, such as limited access to long-term capital to expand their business; both owned and managed by family members; few management skills, that become really important when the business is going to perform well and it is growing. All these companies would really need to be supervised and managed by a highly skilled and qualified figure such as a PE fund manager. But in the reality, the highest percentage of PEs capital is invested in large buyout funds (80%), therefore in the largest companies, which are less than 1/5 respect to the mid-market companies. The picture below explains clearly the situation:



Source: Stratus Group, 2013

The best solution suitable both for mid-market companies and PE fund managers to increase profits would have been simple: to invest in those companies and exploit efficiencies.

Here the sentence of a PE fund manager: *"There is an ocean of midsize companies that are ready to emerge but are underserved and without access to alternative sources of capital. It is probably the sweetest spot—adjusted to underlying risks—for investment in the world today"*[43].

Problem of interest rates for companies: Brazil suffers of financial gap, meaning that more than 70% of Small and Medium Enterprises (SME) use their own internal financial sources to finance themselves and only 4% of them is able to procure that equity by financing. A World Bank's research affirms that in Brazil "*financial intermediation, in terms of both absolute interest rates and spreads, remains among the highest in the world, and credit is rather scarce for a significant proportion of the economy*"[42]. Apply for a loan is very difficult in Brazil, as stated an entrepreneur of a mid-size firm: "*Here in Brazil the banks are useless. They demand onerous collateral, interest rates are prohibitive, and the terms are lousy.*"[42].

Interest rates in Brazil are among the highest in the whole world and this is an excellent reason why small and medium entrepreneurs do not apply for a loan in an institutional investor such as a bank, while the market is satisfied by PE investors, who see their highly attractive opportunity of investment.

For that reason, Brazilian PE industry is not fully satisfied, an industry in which small and medium market is not properly saturated by investors, where the offer is higher than the demand.

Difficulties in Fundraising activity for GPs: in Brazil, GPs of small funds found not few difficulties in raising money to invest in. A proof is given by a Partner of a GP belonging to a small fund, who affirmed he spent 2 years in the hope of raising US$ 200 million in a highly competitive scenario, travelling to more than 80 LPs among USA and Europe. After this long research worldwide, from 2011 until 2013, the above-mentioned Partner came back empty handed. He understood the problem lied in LPs to invest in small funds but above all to invest in Brazil, given its weak economic situation.

It is again confirmed that in an emerging market scenario, international LPs prefer to invest higher amounts of money in largest companies and therefore in significant funds rather than in small ones. The reason behind that is the safety that international LPs find in largest emerging market funds, where they feel safer of not losing money and able to gain higher profits.

[43] Private Equity Investing in Emerging Markets, Opportunities for Value Creation – Roger Leeds – Global Financial Markets (2015)

Given the low attractiveness from international LPs, Brazilian GPs are forced to find LPs in the Brazilian scenario itself. Domestic institutional investors are in recent years opening their exposure to middle asset classes, but other problems still remain.

Historically, the issue lied in the strong Brazilian monetary policy to keep high inflation and this has been reflected in higher interest rates. This latter problem has always encouraged investors worldwide to allocate their money in fixed income rather than in riskier financial asset classes such as PE funds.

Local authorities created some rules to incentive pension funds – which in Brazil are approximately 400 and could be a huge source of capital for PE investors – and other big institutional investors to invest in government bonds. Those incentives consist in ensuring pension funds and other large investors to gain real returns (5–7%) by investing in highly liquid, risk-free government bonds. Of course, these encouragements in investing in secured and risk-free bonds, were not an advantage for GPs' local currency fundraising.

"It is very difficult for me to convince our Board to take the additional risk inherent in private equity when we can consistently get at least a 6 percent real return from our fixed income portfolio" those the words of a Brazilian pension fund investment officer, continuing *"No matter how much I may like private equity and appreciate the rationale for constructing a diversified portfolio of financial assets, the fixed income rationale makes perfect sense for a fiduciary like ours."*[42]. From these sentences it is possible to comprehend the real situation of PEs in Brazil.

In 2012, the pension fund for the employees of São Paulo Metro relayed a very large positive return of 19,5%: 68% of its investment portfolio was allocated in fixed income securities, while only 6% in other assets like PEs.

Therefore, Pension funds' managers are not stimulated in investing in Brazilian PEs since these are riskier and GPs have government issues, too.

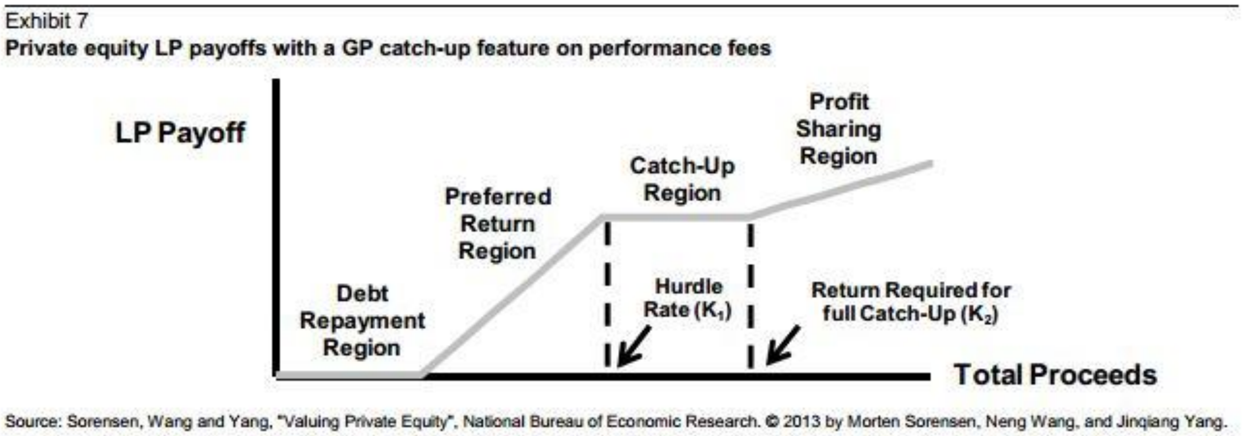
Moreover, another issue is linked to LPs and GPs' returns. It is common practice in PEs that the GP, which is the Partner that manages LP's funds, starts to receive carry only when the investment generates profits above a given "hurdle rate". The "hurdle rate" could be thought as a certain Internal Rate of Return that the LPs must gain before the GPs starts to carry interest profits[44].

Assuming a fund with 10% "hurdle rate" and 20% of carry, the LP will receive 10% of returns, while 80% of all the rest of the profits is allocated among the Partners proportionally to their investment

[44] https://www.jobsearchdigest.com/private-equity-jobs/career-advice/carried-interest-guide/

size. The remaining 20% is given to GPs and those usually receive a 100% of the so-called “catch-up” on carried interest.

This procedure is simply explained by the following graph.



Source: https://news.efinancialcareers.com/it-en/168793/small-chart-explaining-people-work-private-equity-well-paid

The problem in Brazil is that it does not work in this way.

Due to the significant power of pension funds in Brazil, this common pattern is turned upside down, damaging GPs. It happens that in Brazil things work following this story: if, for example, the rate of return is 8% and the inflation is 6%, the LP requires an “hurdle rate” of 6%+8%=14%. Consequently, the GP does not gain any benefit from the “catch-up”. Acting in this way, the GP will start to gain its carried interests only after the LP has received its 14% of returns.

These the words of an investment officer explaining its negotiation with a GP in Brazil: *“We insist on a high hurdle rate, plus a spread to cover inflation, and we refuse to have any ‘catch up.’ It’s a deal breaker for us if a GP resists our terms!”*[42].

This is not fair for GPs that do their job managing LPs’ funds. This problem could also be linked to the high level of interest rates and inflation, which brings LPs acting in such unjust way. Even though the problem is at the base and it is explained from all the above-mentioned features of the Brazilian PE market. The whole market should be restored from the beginning to obtain a cleaner place to work.

6. Conclusions

It is already ascertained that Private Equities' world is a huge and complex one, but fascinating at the same time. Massive transactions take place from Private Equities to institutions to investors to companies and vice versa, someone gains more than others, someone thinks that investing in a certain asset is a safe investment while someone else believe exactly the opposite. The market is like that, it is crazy and irrational and sometimes unfair, like the relationship between Limited Partners and General Partners in Brazil over mentioned, but it also is source of profits and a game arena.

In general, Private Equities are not irrational and/or crazy, when they decide to invest its funds in a proper manner, they have more than clear their ideas of how to invest, when to invest and in which proportion. Due to the fact General Partners have to handle with Limited Partners to raise funds, they must have a precise path to follow from the first moment they invest the first dollar, until they exit the investment and during the whole investment period.

The Carlyle Group, a global alternative American asset management and one of the most successful investment firms, has US$ 201 billion of assets, but it does not invest even 1 cent if behind that cent there is not a logic and a profitable path to follow.

A Private Equity never shows its strategies or its Balance Sheets, everything is private and not disclosed. The tactic built up by an asset manager can only be discovered when it is being implemented, or it could be guessed. Even though a strategy is perfectly calculated and everything is planned, PEs' managers have to deal with and adapt future choices to external forces such as the intrinsic market, the investors, the managers of the company they are investing in, and many others spectators on the scene. This is the most attracting and captivating point in studying PEs.

The same holds for the Private Equity considered in this written, Vinci Partners. It also is a large one, managing billions of dollars among different sectors, industries and States.

From the first years of XXI century, Vinci Partners began to invest in the holding Equatorial Energia. The PE decided that part of its fund will have been dedicated to the electric field and elected this sector as its "cup of tea" for the next years.

As it has been amply explained in the chapters before, Vinci Partners experienced in total 9 years in the electric sector, from 2006 until 2015. These years of involvement with Equatorial Energia, the PE became one of the most informed competitors regarding the sector and expanded its investment horizons more times, in 2008 acquiring Light's shares, in 2011 with Sol Energias, in 2012 with the acquisition of CELPA.

The main point here is that usually the holding period of a PE investing in a company is between 5-10 years, but it is rare a PE invests for almost 10 years consecutively, and Vinci Partners did it. Why?

Because it saw in Equatorial Energia the growing potential that no one else was able to capture. Vinci Partners took Equatorial Energia in 2006 when it was one of the worst companies on the electric market and bring it to the podium, quadruplicating its profits, distributing 10 times the energy it distributed before the acquisition, incrementing 10 times the clients it had before. Vinci Partners literally grew up Equatorial Energia during almost these 10 years of partnership.

From this relationship both Vinci and Equatorial emerged as winners.

Moreover, after that, the chief of the Infrastructure area at Vinci Partners, Jose Guilherme Souza, affirmed that its teams will continue their investments in the energy sector, having now a strong experience in the field. Another proof of the successful investment made by the PE.

Unfortunately, not all the transactions finish in a happy ending. Investing in Brazil, such as in many emerging countries is often a gamble.

On one hand, Brazil benefits of the highly differentiated market which let the customer to a wider investment choice and huge possibility of transactions; on the other hand, given the high volatility and the unpredictability they suffer, elevated are the possibilities to get zero or negative returns.

Another important issue to highlight specifically for emerging countries is the low possibility of obtaining financings. Brazil has a high level of financial resources demand and few capital providers. The main obstacles have been extrapolated and illustrated in the last chapter, and the optimal and maybe utopic solution to these problems could be, first of all, starting to decrease inflation. This would mean more confidence of foreign – and not foreign - investors in Brazilian economy, meaning more and more willing capital providers inside and outside the country, in order to eliminate that endless procedures of GP to find financings; moreover, it would be reflected in higher real returns which would be profitable for everyone and maybe that would eliminate the infinite quarrels between LPs and GPs. Of course, here the main argument is PEs' world, but decrease inflation to an acceptable level is a benefit in all economy fields, most of all in the real economy.

Besides, large institutional investors and pension funds should start to invest in Small and Medium Enterprises. Also this category has deep difficulties in finding capital providers, even though, paradoxically, is much larger in terms of number of companies. But being smaller has higher risk and higher volatility, hot features that keep distant every kind of large investor.

There should arise in Brazil more funds inclined to finance small and medium companies in order to let them to grow and to expand, too. This is an important point to unlock possible future potentials from these firms and to help real economy to mature at a sustainable pace.

Brazil has many resources, but these should be managed and handled in a more efficient way to obtain the maximum benefits and to release this amazing country from its beauty.

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Summary

Department of Economics and Finance

Chair of Equity Markets and Alternative Investments

The Impact of a Private Equity on an Energy Company in the Brazilian Market Scenario

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Contents

Thesis Structure

This master thesis analyses the Private Equity world, examining the role they play in the financial markets, among investors and how they are composed and structured.

Nowadays private equities are an influent presence in the markets, since they make huge transactions buying and selling companies around the markets. A private equity is a kind of "investment club" given that all the investors that take part at the transactions are institutional investors such as banks, investment funds, companies, pension funds, and so on. The purpose of a private equities is to invest its money (money of these institutional investors) in private companies which are already studied and identified by PE's managers, and, after a given period of time, sell it to make profit.

This thesis explains the way the private equities conduct their everyday operations and their strategies to achieve their goal. In the recent years, private equities are giving an important contribution to market development, technological progress and business improvement through their focused investments and this elaboration is a proof of this market evolution.

Brazilian market is highly volatile and risky given its classification as an emerging country, but for that and other reasons it is an interesting market to focus in. High volatility means both large capital inflows and large capital outflows, very high interest rates and irrational investor's reactions, hence this is a pool of opportunities to extract experience and knowledge.

In this analysis there is an overview on the Brazilian private equity market, trying to understand the dynamics of private equities in the Latin America markets over the last 50 years, to introduce one protagonist on this scenario: Vinci Partners.

Follows the deep understanding of this figure regarding its allocation of funds and among its competitors on the market.

Vinci Partners is one of the most influencing private equity on the Latin America market, that is the reason why it was taken in consideration for the analysis of one of the companies it is investing in.

A Case Study is conducted to better catch the repercussions of a private equity on a firm. It is analyzed an electric company named Equatorial Energia, from the beginning of its business owned by the fund GP Investments in 2004, passing to the acquisition from the PE Vinci Partners, arriving to the exit of the latter. The company is examined year by year through its activities and catching its strategies.

Purpose of the Study

All finance people know how important and embedded the economic institutions, the banks, the pension funds, the rating agencies, the investment funds, the private equities are in the market scenario. It is common knowledge the relevance of the transactions made by the above written participants and the heaviness of the decision taken by one of them. All these financial decision-makers could influence the results and the consequences of other people worldwide. The last global financial crisis started from Island, arrived in USA and passed through the Atlantic Ocean expanding to Europe, it is a direct effect of the Globalization that is naturally embracing the world and the people that live in.

The purpose of that thesis is trying to understand how these huge amount of money moves from investors to institutions to private equities to worldwide companies and which are the reasons behind that decisions.

Specifically, the main aim is to comprehend in which measure a private equity is able to influence a firm that belongs to its portfolio investment and which are (if there are) the benefits the target company gains.

Methodology

To analyze the influence that a large fund has on a company it has been taken as a landmark a Case Study, which is the most scientific way to comprehend the reality.

After focusing the attention on the private equity, understanding its position in the market, it is then examined the business and the industry in which the company works in. Follows a deep introspection regarding the evolution of the company in the years in which it was under the control of the private equity. At the end, it is analyzed the gradual change during the length of time in which the private equity participated to the life of the firm, from the entry to the exit date. The analysis has been conducted numerically through the help of Balance Sheet, Cash Flow Statements and Income Statement of the company itself.

Abstract

Private Equity world has great authority and power on the market as whole and therefore on the companies that lie in it. In extremal cases, PEs have the capability to decide whether a company will survive or die in the short-run, if it suffers financial distress. At the same time, PEs are able to determine the destiny of a firm, letting it to grow if a good job is done or vice versa.

The principal object of this written is to comprehend how and in which measure managers of PEs can influence companies and therefore the market. To start the study, PEs have been introduced with their history, the role they play in the market and the operations they take in place.

A Case Study has been utilized for a wider comprehension of the topic. The PE taken in consideration for the analysis is a Brazilian one, called Vinci Partners. Vinci Partners is one of the largest PE in the whole Brazil, counting 3 Funds (2 closed and 1 still open) and more than R$ 3 billion (US$ 0.9 billion) of money invested in the first two funds. This PE has different kinds of investments, such as in agribusiness, retail, energy, education, construction and civil construction, insurance and transportation sectors. It is highly diversified and excellent to be examined.

It has been analyzed the trend over time of the main financials of the target firm, examining the evolution from the beginning – acquisition of the company from the PE – to the end, moment in which the PE exited the company. All the benefits and the drawbacks are examined to a better understanding.

The company chosen is one of its Fund II companies, an electricity firm called Equatorial Energia. At the beginning of its life, Equatorial Energia was considered one of the poorest electricity company. It was formed of just one firm, the so-called CEMAR. In 2005, CEMAR was acquired by Vinci Partners and from that moment on started its exponential growth, which culminated in 2012 with the acquisition of another electric company, CELPA, and the follow-on of Equatorial Energia itself. In few years, Equatorial Energia became a Holding company, holding more firms in the same industry but working on different levels and acquiring also firms in financial difficulties, such as CELPA.

In this case, the acquisition of a firm from a PE has been beneficial for both parties. The company increased its investments, grew in income, expanded its level of customers and even more. Given that Equatorial Energia became listed in 2006, its financial results are shown in the Chapter 4 for a clear and a numerical understanding of the financial improvement. Unfortunately, it is impossible to have the same results for Vinci Partner, that being a PE, does not disclose information.

Moreover, to figure out adequate conclusions it has also been studied the way Brazilian financial market works, how it is structured, its history and how this market is globally categorized. It is important to contextualize the actors in the scene to deeply catch why they act in a specific way, for this reason it has been examined the macro area of the Emerging Markets, the BRICS and the Brazil itself. Many researches have been analyzed to seize and perceive the profitability and the efficiency of emerging markets in PEs' world, such as the numerical presence of PEs, the level of capital raised, the AUM (Asset Under Management) of PEs, the number of deals, the dualism risk-return, in emerging countries.

Regarding Brazil in the specific, it has been conducted a proper analysis respect to 5 key drivers of PE attractiveness (Economic Activity, Capital Market, Taxation, Investor Protection and Corporate Governance, Human and Social Environment), to classify Brazil within Emerging Countries and capturing its point of strength and its weaknesses.

Brazil suffers different problems deriving from its high level of interest rates, the difficulty of fundraising, the subsequent issue of agreement between General and Limited Partner, just to mention some of them.

Brazil is not an easy place to live and to invest in, but despite all these problems in the financial markets, it is a country full of sources and willpower to grow more.

6. Conclusions

It is already ascertained that Private Equities' world is a huge and complex one, but fascinating at the same time. Massive transactions take place from Private Equities to institutions to investors to companies and vice versa, someone gains more than others, someone thinks that investing in a certain asset is a safe investment while someone else believe exactly the opposite. The market is like that, it is crazy and irrational and sometimes unfair, like the relationship between Limited Partners and General Partners in Brazil over mentioned, but it also is source of profits and a game arena.

In general, Private Equities are not irrational and/or crazy, when they decide to invest its funds in a proper manner, they have more than clear their ideas of how to invest, when to invest and in which proportion. Due to the fact General Partners have to handle with Limited Partners to raise funds, they must have a precise path to follow from the first moment they invest the first dollar, until they exit the investment and during the whole investment period.

The Carlyle Group, a global alternative American asset management and one of the most successful investment firms, has US$ 201 billion of assets, but it does not invest even 1 cent if behind that cent there is not a logic and a profitable path to follow.

A Private Equity never shows its strategies or its Balance Sheets, everything is private and not disclosed. The tactic built up by an asset manager can only be discovered when it is being implemented, or it could be guessed. Even though a strategy is perfectly calculated and everything is planned, PEs' managers have to deal with and adapt future choices to external forces such as the intrinsic market, the investors, the managers of the company they are investing in, and many others spectators on the scene. This is the most attracting and captivating point in studying PEs.

The same holds for the Private Equity considered in this written, Vinci Partners. It also is a large one, managing billions of dollars among different sectors, industries and States.

From the first years of XXI century, Vinci Partners began to invest in the holding Equatorial Energia. The PE decided that part of its fund will have been dedicated to the electric field and elected this sector as its "cup of tea" for the next years.

As it has been amply explained in the chapters before, Vinci Partners experienced in total 9 years in the electric sector, from 2006 until 2015. These years of involvement with Equatorial Energia, the PE became one of the most informed competitors regarding the sector and expanded its investment horizons more times, in 2008 acquiring Light's shares, in 2011 with Sol Energias, in 2012 with the acquisition of CELPA.

The main point here is that usually the holding period of a PE investing in a company is between 5-10 years, but it is rare a PE invests for almost 10 years consecutively, and Vinci Partners did it. Why?

Because it saw in Equatorial Energia the growing potential that no one else was able to capture. Vinci Partners took Equatorial Energia in 2006 when it was one of the worst companies on the electric market and bring it to the podium, quadruplicating its profits, distributing 10 times the energy it distributed before the acquisition, incrementing 10 times the clients it had before. Vinci Partners literally grew up Equatorial Energia during almost these 10 years of partnership.

From this relationship both Vinci and Equatorial emerged as winners.

Moreover, after that, the chief of the Infrastructure area at Vinci Partners, Jose Guilherme Souza, affirmed that its teams will continue their investments in the energy sector, having now a strong experience in the field. Another proof of the successful investment made by the PE.

Unfortunately, not all the transactions finish in a happy ending. Investing in Brazil, such as in many emerging countries is often a gamble.

On one hand, Brazil benefits of the highly differentiated market which let the customer to a wider investment choice and huge possibility of transactions; on the other hand, given the high volatility and the unpredictability they suffer, elevated are the possibilities to get zero or negative returns.

Another important issue to highlight specifically for emerging countries is the low possibility of obtaining financings. Brazil has a high level of financial resources demand and few capital providers. The main obstacles have been extrapolated and illustrated in the last chapter, and the optimal and maybe utopic solution to these problems could be, first of all, starting to decrease inflation. This would mean more confidence of foreign – and not foreign - investors in Brazilian economy, meaning more and more willing capital providers inside and outside the country, in order to eliminate that endless procedures of GP to find financings; moreover, it would be reflected in higher real returns which would be profitable for everyone and maybe that would eliminate the infinite quarrels between LPs and GPs. Of course, here the main argument is PEs' world, but decrease inflation to an acceptable level is a benefit in all economy fields, most of all in the real economy.

Besides, large institutional investors and pension funds should start to invest in Small and Medium Enterprises. Also this category has deep difficulties in finding capital providers, even though, paradoxically, is much larger in terms of number of companies. But being smaller has higher risk and higher volatility, hot features that keep distant every kind of large investor.

There should arise in Brazil more funds inclined to finance small and medium companies in order to let them to grow and to expand, too. This is an important point to unlock possible future potentials from these firms and to help real economy to mature at a sustainable pace.

Brazil has many resources, but these should be managed and handled in a more efficient way to obtain the maximum benefits and to release this amazing country from its beauty.

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